Cowichan Tribes
TRANSPORTATION AND MOBILITY PLAN

September 2015

Acknowledgements

This plan was developed with the input of Cowichan Tribes members. Over the past six years, hundreds of members devoted time to its creation. Through open houses, focus groups, surveys and other engagement members helped staff to learn areas of safety and mobility concerns throughout the reserves.

Cowichan Tribes staff also provided input throughout the development of this plan, taking time to meet with the CCP team to discuss work that they were already doing to achieve the objectives of the plan.

Cowichan Tribes Council supported this plan.

Our planning team has seen many dedicated individuals contribute their ideas and energy to carry out this plan including Brenda Underwood, Rowena Edwards, Larry George, Helen Reid and Natalie Anderson.

Our Planning consultants, EcoPlan, worked with Cowichan Tribes throughout this planning project and provided technical support where it was needed.

Huy tseep q'u to all listed above that have contributed to developing this Transportation and Mobility Plan.

Table of Contents

SECTION 1: ABOUT THIS PLAN 2

This overview offers background information about this plan and how the plan relates to the Cowichan Tribes Comprehensive Community Plan. It also describes how the plan was developed.

SECTION 2: HOW THINGS ARE NOW 5

This section briefly summarizes the main transportation and mobility challenges facing our community, and outlines our members' habits and needs.

SECTION 3: WHAT WE WANT TO IMPROVE 10

This section describes our community's transportation and mobility objectives, and summarizes the strategies and specific actions we will take in two key transportation and mobility areas: network improvements and programs/servicing.

SECTION 4: HOW WE ARE GOING TO DO IT 17

This section provides more details on the strategies and actions that make up this plan, including rationale, context, timing, and implementation. It is meant to supplement information in Section 3, *What We Want to Improve*, for those responsible for implementation, or for anyone who wants more information about plan specifics.

SECTION 5: AREA TRANSPORTATION PROFILE 35

This section offers a more thorough assessment of our community's current transportation and mobility challenges. It also provides a detailed account of the community engagement that informed the plan.

APPENDICES 45

Appendix 1: CCP Transportation and Mobility Map

Appendix 2: Tzouhalem Community Survey

Appendix 3: Tzouhalem Community Survey Results

Appendix 4: Street Safety Issues –MoTI submission

SECTION 1:

About this Plan

Background

In 2014 we completed a Comprehensive Community Plan (CCP) guided by years of engagement with Cowichan Tribes members, council and staff. Street safety was identified as a top concern. During engagement, we found out that the most populated and heavily used streets on Cowichan Tribes reserves are in urgent need of basic infrastructure such as walkways, lighting and speed bumps. Members helped us map the street and intersections that were the biggest safety concerns, and to tell us what kind of improvements were needed.

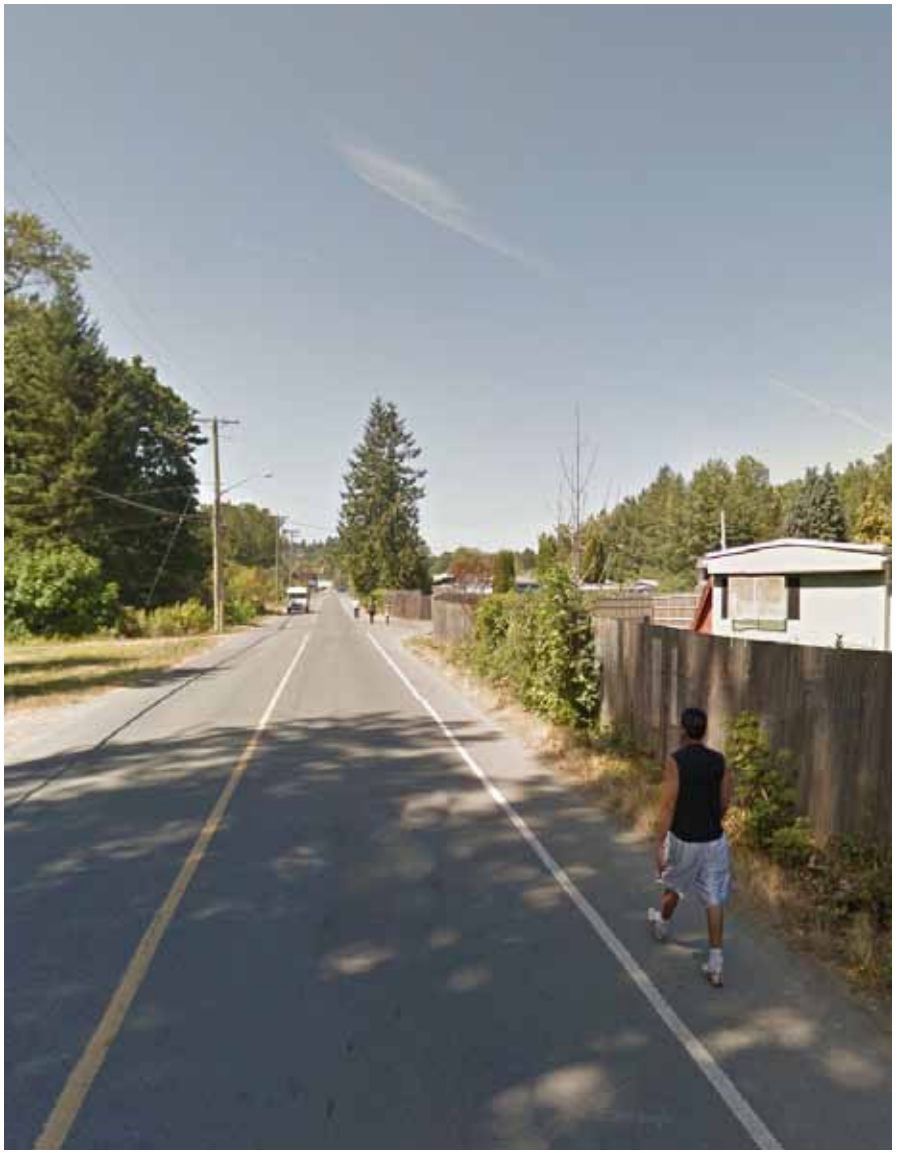
Members were most concerned about the following streets:

- Boys Rd.
- Allenby Rd.
- River Rd.
- Tzouhalem Rd.
- Miller Rd.
- Indian Rd.

Member feedback was included in the CCP as the first phase of the *Community Transportation and Mobility Plan* in the form of an issues map (Appendix 1). While this work helped us understand general areas and issues that need to be fixed first, we needed more detail to complete the plan. That's why the first action identified in the CCP – part of the Strategic Area on "Street Safety and Mobility" – is a recommendation to complete the *Community Transportation and Mobility Plan*.

This report represents the next phase of work on this plan and is meant to fulfill the purpose described in Strategic Area 1 of the CCP, Street Safety and Mobility:

To improve the ability of Cowichan Tribes members to safely and comfortably move between their homes and other locations, and more easily access places of work, education, recreation, and other needs.



HOW WE MADE THIS PLAN

To learn more about the transportation and mobility problems in our community, we started a focused planning process in January 2015. We started by doing a lot of research about transportation in the area, including a review of related work being done by the City of Duncan, the Municipality of North Cowichan, the Ministry of Transportation and Infrastructure, BC Transit, and by other departments in Cowichan Tribes.

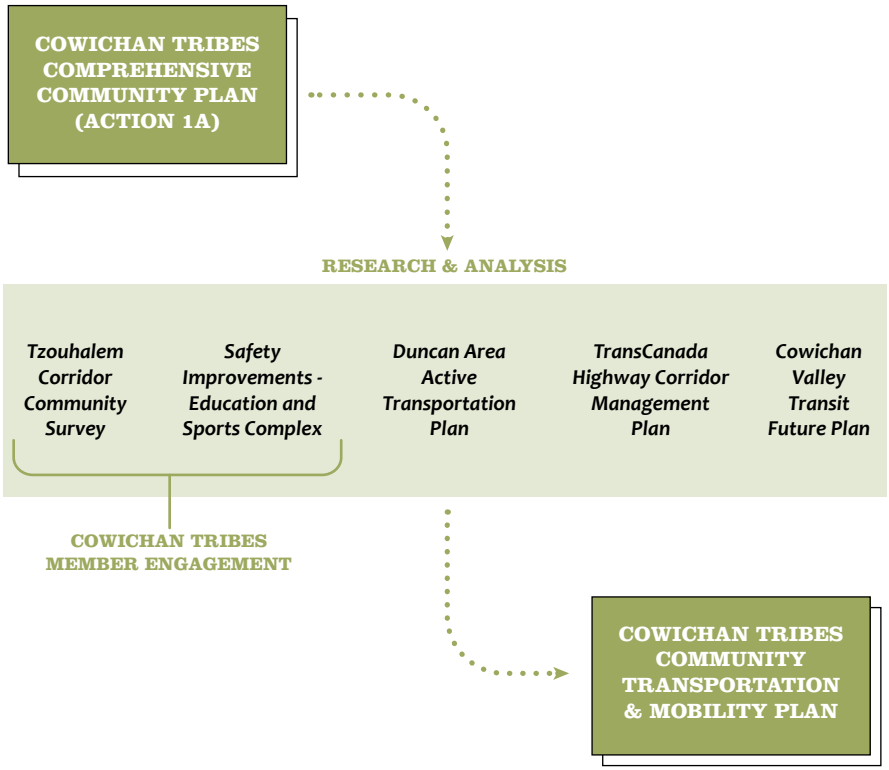
We also conducted more engagement with Cowichan Tribes members and staff. But because our community is so large and spread out, we are doing this work one area – or corridor – at a time. A 'corridor' is a main street and the small streets that connect to it. This not only allows us to make progress with limited resources, but also to develop, test, and improve a system for doing corridor-specific studies for use across our whole community. This phase of planning work included two corridor studies:

- ***Tzouhalem Road Corridor*** was selected as a "pilot", or test project, for developing the tools and techniques we will need for continuing transportation and mobility planning across our reserves. Tzouhalem Road was selected because it was identified as a high priority street by members during the CCP and because we were approached by the Ministry of Transportation and Infrastructure (MoTI) specifically about improvements to this street. This pilot included the development and delivery of a door-to-door community survey asking residents about how they get around, what obstacles they face, and what they'd like to see improved first.

- ***River Road, part of the Allenby Road Corridor,*** was the site of an area safety study commissioned by Aboriginal Affairs and Northern Development Canada (AANDC) called "*Safety Improvements – Education and Sports Complex*". Among other things, it includes a series of recommendations for improvements to the roads, walkways, and pathways along and connecting to River Road. These transportation specific recommendations have been included in this transportation and mobility plan. A full study and member survey still has to be done for the rest of the Allenby Corridor.

We are going to keep doing these detailed corridor studies in the other reserve areas (Boys Road, Miller Road, and Indian Road) until we have covered all the main transportation routes in our community.

The diagram below shows how all these sources described above helped build our plan. For more details on background research and engagement, see section 5.1: *Studies and Engagement*.


COWICHAN TRIBES COMPREHENSIVE COMMUNITY PLAN (ACTION 1A)
RESEARCH & ANALYSIS
Tzouhalem Corridor Community Survey
Safety Improvements - Education and Sports Complex
Duncan Area Active Transportation Plan
TransCanada Highway Corridor Management Plan
Cowichan Valley Transit Future Plan
COWICHAN TRIBES MEMBER ENGAGEMENT
COWICHAN TRIBES COMMUNITY TRANSPORTATION & MOBILITY PLAN

SECTION 2:

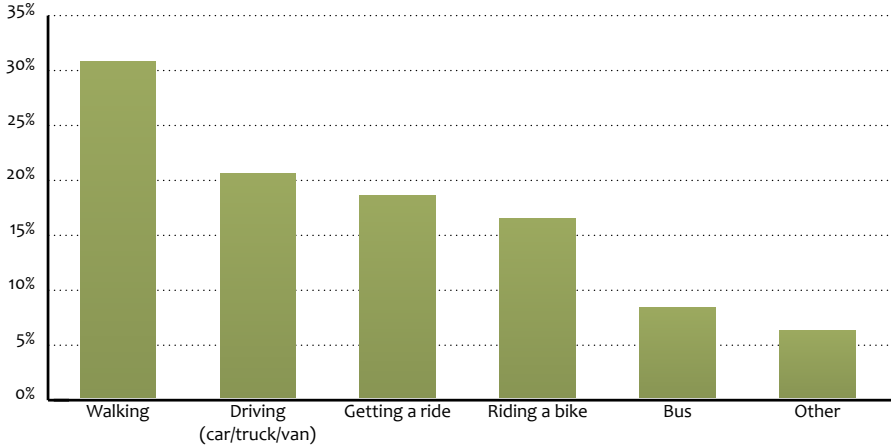
How things are now

We talked to members and did extensive research about the transportation habits, challenges and needs of our community. This section is a summary of the key findings. For more details see Section 6: Area Transportation Profile.

WE WALK AND RIDE OUR BIKES A LOT – AND THAT'S GREAT!

Many of our members walk and ride their bikes to get around (almost half of us – which is a lot more than most communities)[1]. In many ways, this is a good thing: it's great for our health, we see more of each other, and it is an inexpensive way of getting around.

Common Mode of Travel



THE PLACES WE USUALLY GO ARE THE HARDEST TO GET TO.

The Trans-Canada Highway, big city streets, a railway, and natural features like rivers and forests cut through our community, separating our reserves from the Band Offices, central Duncan and other places. According to a survey of Tzouhalem residents, Central Duncan is the most common destination and the hardest to get to. And that's where most of the shops and services we need are located!

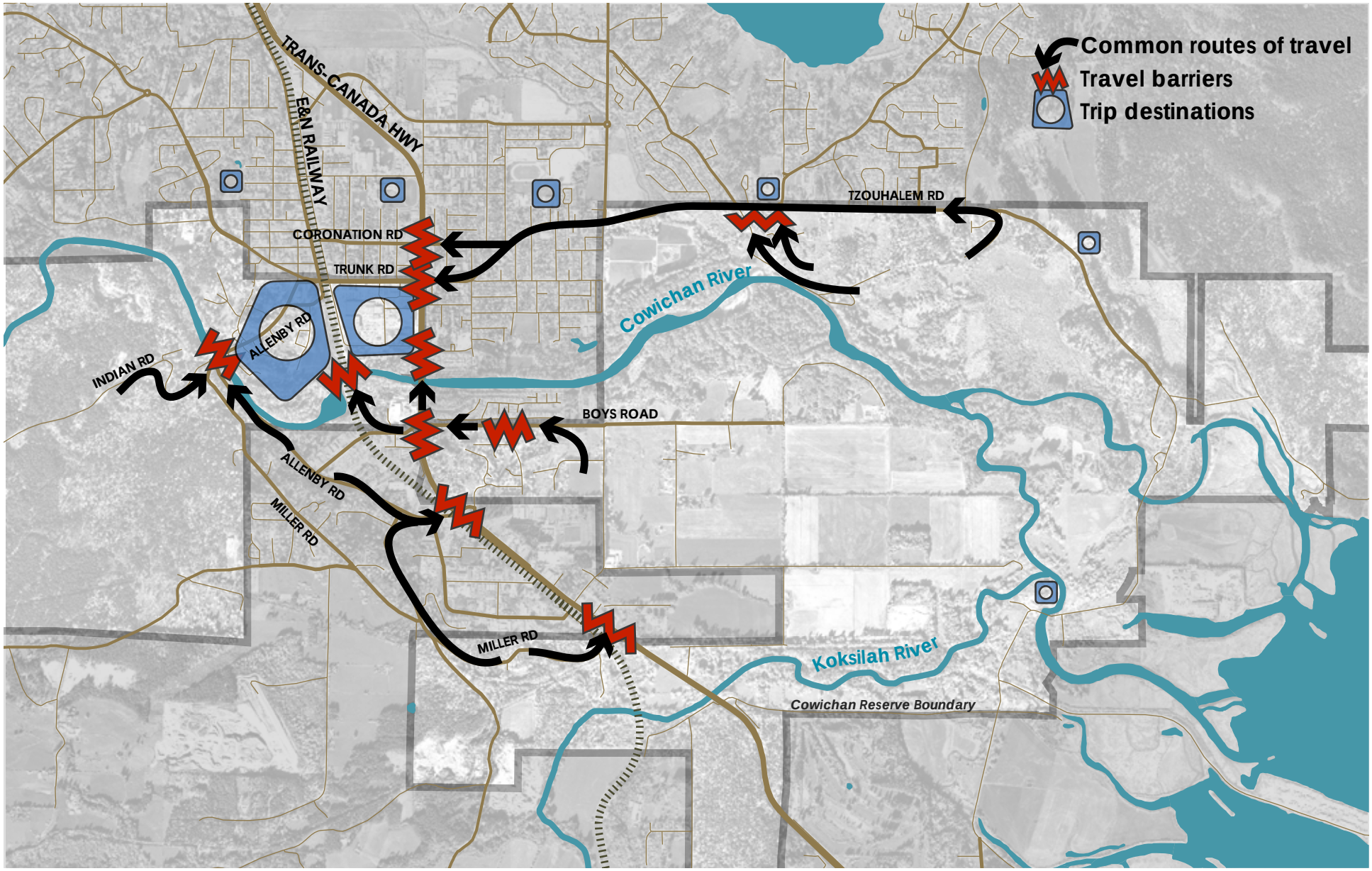
TOP 5 PLACES MEMBERS USUALLY GO	TOP 5 HARDEST PLACES TO GET TO
1. Central Duncan (22%)	1. Central Duncan (27%)
2. School	2. Hospital/Medical Services
3. Band Offices	3. Traditional Use Areas
4. Work	4. School
5. Hospital/Medical Services	5. Home of a friend or family

OUR COMMUNITY IS NOT AN EASY OR SAFE PLACE TO WALK OR RIDE A BIKE.

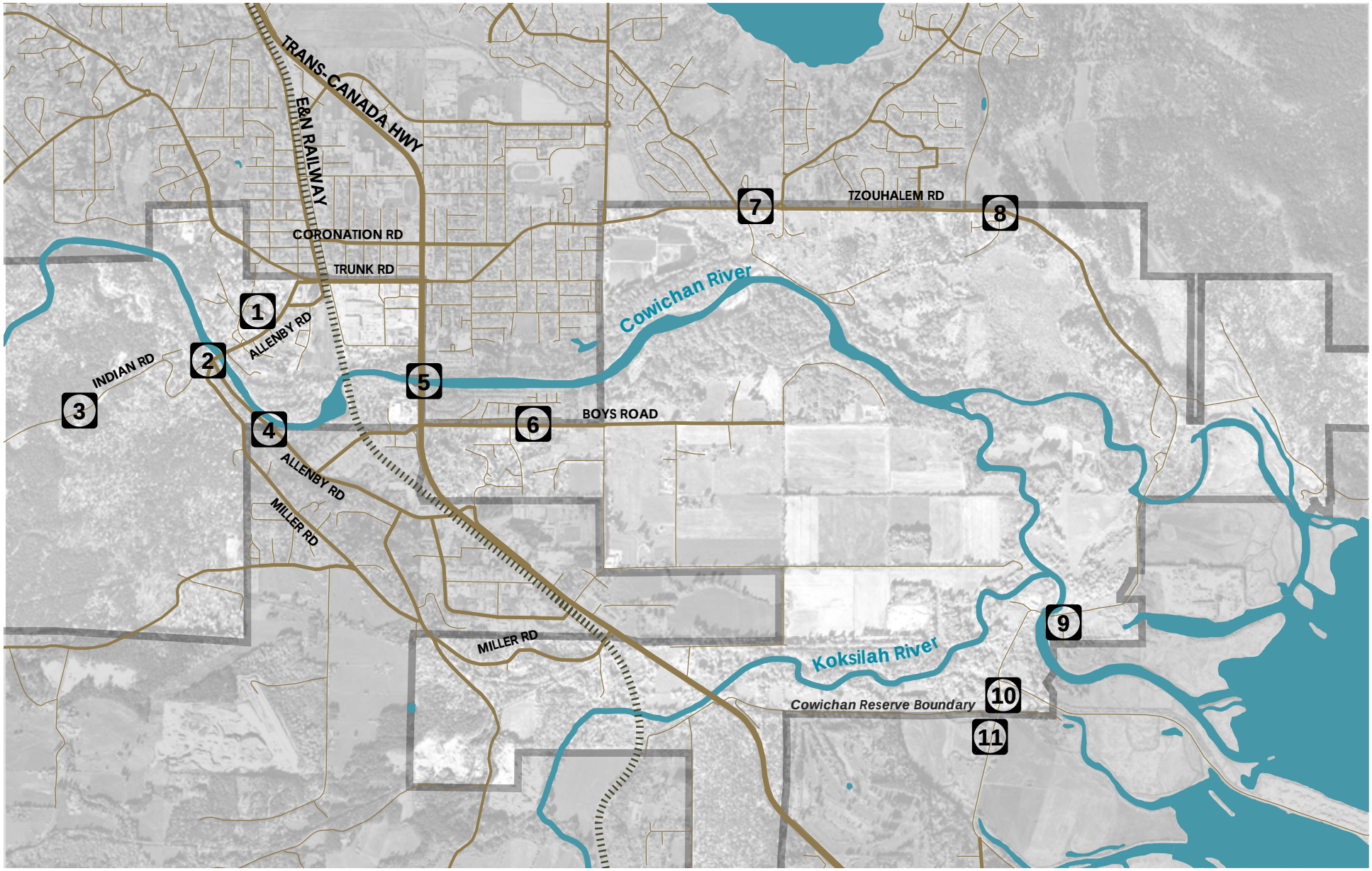
The few routes we have can be hard and sometimes dangerous to use. There are a lot of places missing walkways, streetlights, safe crossings, or where traffic drives too fast. And because of all the barriers, sometimes we have to go really far out of our way to get somewhere just across the street – that's why so many people get in accidents jaywalking across big roads or the Trans-Canada Highway.

The next two maps shows what is described above. Map 1 (opposite) shows how the barriers that split up our community (roads, rivers, and the railway), cut us off from the places we are trying to go.

1 From Tzouhalem Corridor Community Survey


Common routes of travel
Travel barriers
Trip destinations
TRANS-CANADA HWY
E&N RAILWAY
CORONATION RD
TRUNK RD
TZOUHALEM RD
Cowichan River
ALLENBY RD
INDIAN RD
BOYS ROAD
ALLENBY RD
MILLER RD
MILLER RD
Koksilah River
Cowichan Reserve Boundary

Map 2 (below) shows the poor quality of some of our most commonly used routes. The pictures of people walking, cycling and rolling are from Google maps.



1

All photos from Allenby Road between Cowichan offices and Whitebridge: cyclist avoids shoulder potholes at poorly defined intersection (top); young couple with stroller heading north toward Duncan (bottom); pedestrian walks along shoulder crossing poorly defined driveway (right)

4

Cyclists using Allenby Rd to get to and from Central Duncan have no separation from traffic

8

Shoulder used for parking by area hikers forces pedestrians into street (1740 Tzouhalem Rd)

9

A mother pushing a stroller along Tzouhalem's gravel shoulder as a car approaches

2

Difficult to navigate intersection of Allenby, Miller and Indian roads at entrance to Whitebridge

5

A person in a wheelchair using the sidewalk while a cyclist is obliged to use the roadway (top); a young couple with a stroller using a sidewalk heading north (middle); a scooter and pedestrians on the sidewalk south of the silver bridge (bottom)

10

Cyclists must share narrow bridges with traffic on Tzouhalem Road

3

Two youths ride down Indian Rd towards Duncan in oncoming lane (5548 Indian Rd.) towards intersection below

6

Members frequently walking along Boys Road must use a narrow shoulder exposed to high-speed traffic

7

Difference in infrastructure on and off-reserve as Jayne Rd (top) becomes Quamichan Rd (bottom) in crossing Tzouhalem Rd.

11

The intersection at Tzouhalem and Cowichan Bay Road offer little support for pedestrians that need to cross safely to the only bus stop serving the area

SECTION 3:

What we want to improve

3.1 Transportation and Mobility Objectives

The general purpose of this plan was set out in the Street Safety and mobility strategy in our CCP:

To improve the ability of Cowichan Tribes members to safely and comfortably move between their homes and other locations, and more easily access places of work, education, recreation, and other needs.

After hearing a lot more from members about what they'd like to see done first, and taking a close look at the condition of our streets, we came up with some goals for this plan.

Getting around without a car has a lot of benefits: people get exercise and fresh air, see their neighbours, and save money. Most communities are trying hard to have as many people walk and ride their bikes as we do. So the first two goals of this plan are focused on making it easier and better for our members to get around without a car.

1. **To make using streets, walkways, and intersections safer, less stressful, and easier**
2. **To make the routes to places we go most often more direct and better connected**

Some places people go, or things they have to do, just can't be done on foot. For those times, our members need other options. Goals 3 and 4 address the community need for better access to transit and other vehicle-based services.

3. **To help make on-reserve transit service meet the needs of members**
4. **To help members get better access to cars for when they need them**

3.2 Actions

This plan covers two levels of transportation and mobility actions: network improvements and programs/servicing. Future planning needs are also outlined. The actions come in three types organized by how long it will take to complete them:

Quickstarts: simple, inexpensive actions that can be completed quickly

Short-term: high priority but more complex projects that should be started immediately but will take the involvement of multiple parties (e.g. Duncan, North Cowichan, and MoTI) working on multiple tasks and a year or more to complete.

Medium-term: complex projects that are highly dependent on outside organizations for approvals and funding.

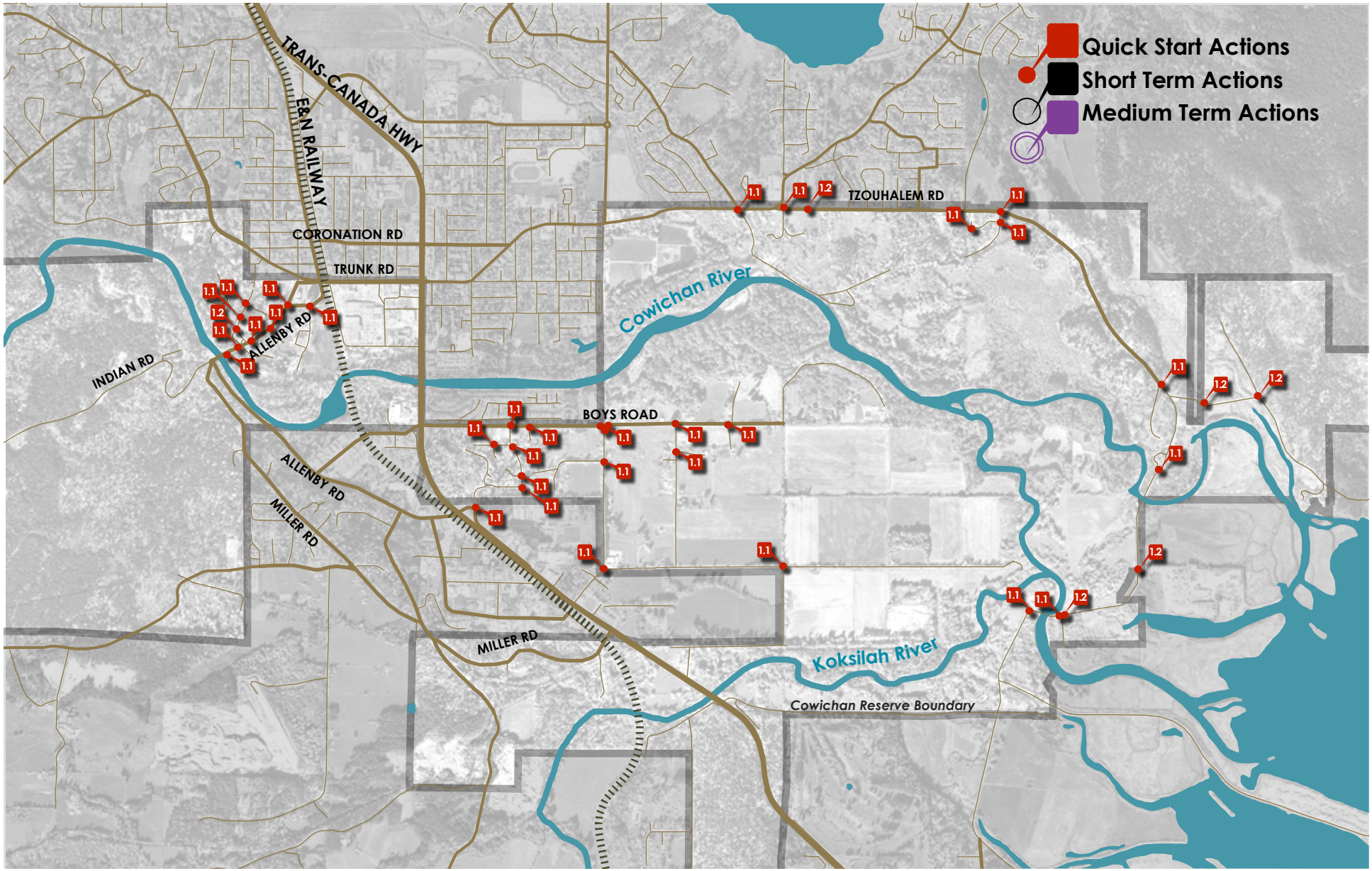
The actions have also been grouped into strategies based on where they are located and who will be working on them. For more details about the strategies, see Section 4.

NETWORK IMPROVEMENTS

The improvements to the transportation network are designed to better connect Cowichan residential areas with the central areas where services, shopping, and community amenities are located. This means improvements to the key pedestrian and cycling routes connecting our on-reserve communities with nearby schools, Central Duncan, Cowichan Tribe services, and other reserves.

The next two maps show where over 50 small and large-scale improvements to our streets planned for the next few years (there was too many to show on one map).

The map below shows all the quickstart actions from the first strategy. The map and actions on the following pages are from the remaining strategies (a mix of quickstart, short-term and medium-term actions).

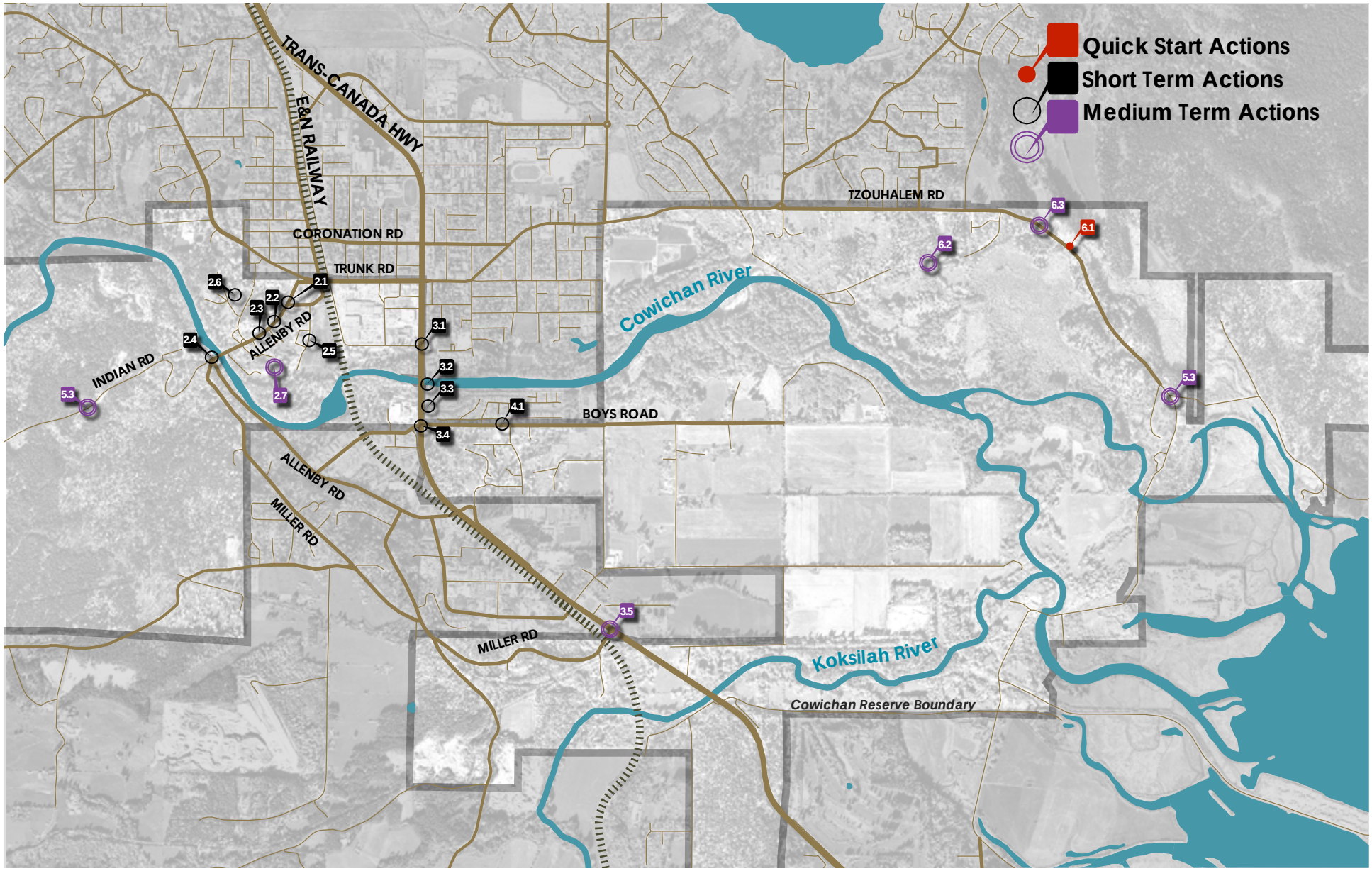


PLAN STRATEGIES AND ACTIONS		
STRATEGY 1: MAKE MINOR STREET SAFETY IMPROVEMENTS		
Quick Start	1.1	Street safety upgrades (new signage and road paint at 35 intersections across reserves)
Quick Start	1.2	Streetlight additions to minor streets across reserve

Quickstarts – building momentum for the plan

Even though the transportation and mobility plan was still being written, we saw that there were a lot of actions that could be done right away. And we weren't the only ones: since this summer, we have been working closely with ICBC to get funding together for a lot of the quickstarts described in Strategy 1 (Action 1.2, to be exact). With ICBC's help, we found 35 intersections that could be made safer with new signs, crosswalks, and stop-lines. Cowichan Tribes council has already passed a motion to move forward on these projects, so many of them will be complete before the end of the year. In fact, we've already started putting up new signs around the reserve, like this stop sign, at Thiek and Chaster.

These quickstarts will help us get the plan on the ground and keep the momentum going. While it's a great success, there is still a lot of work to be done!


Quick Start Actions
Short Term Actions
Medium Term Actions
TRANS-CANADA HWY
E&N RAILWAY
CORONATION RD
TRUNK RD
TZOUHALEM RD
ALLENBY RD
INDIAN RD
BOYS ROAD
MILLER RD
Cowichan River
Koksilah River
Cowichan Reserve Boundary
2.1
2.2
2.3
2.4
2.5
2.6
2.7
3.1
3.2
3.3
3.4
3.5
4.1
5.3
6.1
6.2
6.3

PLAN STRATEGIES AND ACTIONS		
STRATEGY 2: MAKE IT EASIER TO GET TO THE SERVICES ON AND AROUND ALLENBY ROAD		
Short Term	2.1	A pedestrian-controlled crosswalk in front of CT offices
Short Term	2.2	Walkway /multi-use pathway along Allenby from Whitebridge to Government St
Short Term	2.3	Cycling lane along Allenby from Whitebridge to Government St
Short Term	2.4	Improved intersection of Allenby, Indian, & Miller Roads
Short Term	2.5	River Road street safety upgrades
Short Term	2.6	Road safety improvements to Somena
Medium Term	2.7	Pathway improvements from Allenby to surrounding areas
STRATEGY 3: MAKE THE TRANS-CANADA HIGHWAY SAFER AND EASIER TO CROSS AND WALK/RIDE ALONG		
Short Term	3.1	A pedestrian controlled signal at the intersection of the Trans-Canada Highway and Cowichan Way
Short Term	3.2	A pedestrian/bicycle bridge across the Cowichan River beside the Silver Bridge
Short Term	3.3	A multi-use path along the east side of the Trans-Canada from Boys Rd (to at least Trunk Rd)
Short Term	3.4	Improve pedestrian safety at Boys Rd/ TCH intersection
Medium Term	3.5	Pedestrian activated crossing of TCH at Miller Rd
STRATEGY 4: MAKE BOYS RD SAFER FOR MEMBERS WALKING AND RIDING THEIR BIKES		
Short Term	4.1	Upgrades to Boys Road between the Trans-Canada Highway and Mission Road that will improve safety for pedestrians and cyclists travelling the road
STRATEGY 5: BRING BETTER TRANSIT SERVICE TO THE RESERVES		
Quick Start	5.1	Bus pass program (not shown on map – see next page)
Quick Start	5.2	Communications about free bus tickets in Duncan (not shown on map – see next page)
Medium Term	5.3	New bus stop locations on-reserve.
Medium Term	5.4	Improved bus service on-reserve
STRATEGY 6: MAKE TZOUHALEM ROAD CORRIDOR SAFER FOR MEMBERS WALKING AND RIDING THEIR BIKES		
QS	6.1	Address parking issue at St. Anne's Church
Medium Term	6.2	Quamichan west/ east road connection
Medium Term	6.3	Redevelop Tzouhalem Road to improve pedestrian and cyclist safety and connections.
STRATEGY 7: PROVINCIAL ROAD UPGRADES		
Medium Term	7.1	Upgrades to Indian Road, Allenby Road, and Miller Road

PROGRAM AND SERVICE IMPROVEMENTS

Though they can't be mapped, program and service improvements are equally important to our members. Better programs and improved services will provide us with the tools we need to access central service areas safely and efficiently. Program and service actions in this plan include:

Strategy 5: Bring better transit service to the reserves

- ***Action 5.1:*** A bus pass program that will provide rebates to members on-reserve who buy a monthly bus pass
- ***Action 5.2:*** Improve communications about free bus tickets available in Duncan

Strategy 8: Provide members with more resources and training

- ***Action 8.1:*** Establish a **build-a-bike-program**, or in other words, a "workshop" where members can learn about bike maintenance and road safety, and ultimately build their own bike.
- ***Action 8.2:*** Establish an **auto-mobility program**, which could offer a driver's training program, a car co-op, mentoring for drivers-in-training, and a volunteer program for new drivers to help Elders get to essential appointments.

For more information on these actions, see Section 4.

FUTURE PLANNING

As outlined in Section 2, studies have been carried out along the Tzouhalem Road Corridor and the River Road to identify specific safety and mobility issues that will be addressed as part of this plan. However, studies of the following remaining Cowichan Tribes transportation corridors are necessary in order to provide more detailed recommendations for these areas, including prioritization and sequencing:

- Boys Rd.
- Allenby Rd. (in addition to work already done on River Road)
- Miller Rd.
- Indian Rd.

In general, future studies and planning concerning these corridors will enable Cowichan Tribes to continue to address specific transportation and mobility challenges faced by community members in their own neighbourhoods.

SECTION 4:

How we are going to do it

This section describes how the actions (from Section 3) are going to be completed, including who will work on it, when they will work on it, and who they will be working with (like the City of Duncan, Municipality of North Cowichan, or different funding agencies).

The actions are organized in a way that will make it easier to get things done. Some actions are grouped by location (e.g Boys Rd, Tzouhalem Rd.), and others on how projects would be funded or what external groups will be responsible for much of the work (e.g. MoTI). We call these groupings "strategies".

Within the strategies, the actions have also been organized on a timeline based on when they should be started. We have tried to order them in a way that balances our priorities with opportunities. For example, even though Tzouhalem Road improvements are a high priority, we are going to wait until we hear about a sewer upgrade for the area planned to begin in 2017. That way, we can probably do all the upgrades to Tzouhalem Road at once. If we try to do some now, we will be wasting limited resources on work that might get redone anyway.

Here is how we have sequenced the actions:

- Quickstarts: simple, inexpensive actions that can be completed quickly
- Short-term: high priority but more complex projects that should be started immediately but will take the involvement of multiple parties (e.g. Duncan, North Cowichan, and MoTI) working on multiple tasks and a year or more to complete.
- Medium-term: complex projects that are highly dependent on outside organizations for approvals and funding.

Strategy 1 – Minor Street Safety Improvements

CONTEXT AND RATIONALE

Cowichan Tribes was approached by ICBC about the work we are doing on this plan and told us they could provide 50% of funding for projects that could improve pedestrian safety and be completed by December 31st of a given year. They have two funding streams:

- **Reactive:** Projects that are at high collision locations with potential gains in terms of reduced pedestrian collisions. Maximum project funding is approximately $100,000. Proposed projects will undergo a cost-benefit analysis by ICBC to determine if they are eligible for funding.
- **Proactive:** Smaller projects (max. $10,000) that should have a clear safety benefit but do not have to demonstrate a high potential for reducing accidents.

We saw that we had many potential actions that qualified under both funding streams, including some smaller ones that could be completed by the end of 2015, and others that can be applied for in the next year of funding.

These projects will bring immediate safety benefits to members walking and riding their bikes on and near reserves. They will also help build momentum for the plan by getting projects on the ground quickly.

DESCRIPTION

A series of small actions to improve pedestrian and cyclist safety across the network that can be completed quickly and inexpensively. They are grouped by phases based on which round of ICBC funding they can be submitted under.

Type	Action	Details	Notes
Quickstart	S1.1 – Intersection upgrades	Improvements to 35 intersections throughout our reserves, including: • New stop bars at 35 intersections • Crosswalks at 8 intersections	Grouped as part of 2015 application to proactive funding and can be completed by Dec.31, 2015. These are all actions that can be completed without MoTI approval.
Quickstarts	S1.2 Add streetlights to minor streets across reserve	Lights placed at dangerous locations (e.g., corners, intersections) of the smaller streets connecting to the primary streets in S7.1 (e.g. Khenipsen, Club Road)	These are for the non-provincial roads on-reserve that MoTI is not responsible for.

Implementation Tasks:

	Task	Personnel	Timeline	Status
S1.1 Intersection upgrades				
1.1	Submit actions to ICBC	CCP Coordinator	Aug.	Complete
1.2	Work with ICBC to refine and select actions	CCP Coordinator; Alec Johnnie; Angie underwood	Sept.	Complete
1.3	Liaise with MoTI to get actions approved	CCP Coordinator	Late Sept. -Early Oct.	
1.4	Cost and develop workplans for approved actions	Alec Johnnie, CCP Coordinator	Early Oct.	
1.5	Phase 1 construction	Alec Johnnie	Oct. – Dec. 31, 2015	
1.6	Continue working with ICBC to identify more improvements to Cowichan street network	CCP Coordinator; Alec Johnnie; Angie Underwood	2016 - 2017	
S1.2 Add streetlights to minor streets across reserve				
1.7	Coordinate with O&M personnel to compile list of streets in need of improved lighting	CCP Coordinator; Alec Johnnie	Sept. – Oct. 2015	
1.8	Installation of streetlights	Alec Johnnie	2016	

Strategy 2 - Make it easier to get to the services on and around Allenby Road

CONTEXT & RATIONALE

The area around North Allenby Road, including River Road, is considered a centre of positive community activity. It has a number of sports and recreation facilities, and educational, and cultural and community amenities. As the location of our administration offices, it is also where many of the essential services for our members are located. It is also considered an extremely unsafe area, especially for youth.

River Road, although the site of a lot of positive community activity (especially for youth), also suffers from dangerous walking conditions, gang activity, and has been the site of serious crimes. As a result, with the help of AANDC, we have completed a plan to upgrade the safety conditions along River Road, as summarized in the "Safety Improvements – CPMS 11535 Education and Sports Complex" report. The plan includes a suite of upgrades to the area to address two main safety issues: intruder security, and traffic and pedestrian safety. Actions include street re-alignments, new walkways and streetlights, security cameras, perimeter fencing, brush clearance, and the construction of a slow pitch field and lacrosse box (See Appendix for details).

Kids walking from Allenby to Kakalatza on short-cut
Cyclist avoiding potholes on Allenby shoulder
Pedestrian heading into town on Allenby shoulder
Couple with stroller at corner of Thorne and Allenby
Allenby Road
Kakalatza Road
Thorne Road
Parking
Existing sidewalks
Current pedestrian routes
Sidewalk gaps

While this plan awaits funding approval, we expect the North Allenby Road area will only become a more popular community as these upgrades are made. Currently, Allenby Road, a well-used route for members walking and riding bicycles, has high traffic volume and lacks safe walkways and crossings.

Allenby Road has a complicated jurisdictional status. While it is a provincial route, falling under the jurisdictions of MoTI, it also runs through Cowichan Tribes IR#1, possibly making improvements or maintenance eligible under AANDC funding. The City of Duncan has also expressed interest in improvements to the pedestrian network along Allenby Road and a willingness to support Cowichan Tribes where possible, opening up other possible funding options for local community infrastructure.

DESCRIPTION

Improvements to improve the safety and connectivity of the Allenby Road Corridor for pedestrians and cyclists that are coordinated with the improvements recommended in the "Safety Improvements – CPMS 11535 Education and Sports Complex" report. These include:

Type	Action	Details	Notes
Short-term	S2.1 A pedestrian-controlled crosswalk in front of CT offices	At or near intersection with River Road.	Identified both in "Safety Improvements – CPMS 11535 Education and Sports Complex" report and MoTI issues list. Multiple potential funders (ICBC, MoTI, AANDC)
Short-term	S2.2 Walkway /multi-use pathway along Allenby from Whitebridge to Government St	Requires connecting up with existing walkways by admin offices. May be full sidewalks, or improved shoulders with separation. Also see S23 (below)	Involves MoTI, AANDC, and CoD in different aspects of funding, engineering studies, construction, maintenance. Included as part of MoTI issue list.
Short-term	S2.3 Cycling lane along Allenby from Whitebridge to Government St	Any engineering or studies related to S2.2 or future road upgrades should take this into account.	Same as S2.2 above.
Short-term	S2.4 Improved intersection of Allenby, Indian, & Miller Roads	Improvements to make the intersection safer and easier to use for all modes	Primarily MoTI responsibility; included as part of MoTI issue list.
Short-term	S2.5 River Road street safety upgrades	As described in the "Safety Improvements – CPMS 11535 Education and Sports Complex" report	Proposal submitted to AANDC in May 2015
Short-term	S2.6 Road safety improvements to Somena	Streetlights for Club Road and other necessary improvements.	Minor improvements included as part of S1.1 and S2.2 as well as MoTI issue list. Additional work would require engagement (i.e., Corridor Plan for Allenby Rd).
Medium-term	S2.7 Pathway Improvements from Allenby to surrounding areas.	For example, connecting Kakalatza and Thorne Roads to River Road amenities.	Requires engagement (i.e., Corridor Plan for Allenby Rd).

The needed improvements to Allenby Road (S2.1 to S2.4) have clear community support and are now more an issue of working with partners and other agencies to secure funding for engineering studies, construction and maintenance.

Improvements to the surrounding area (S2.5 and S2.6) will require more engagement with residents, perhaps involving an application of the updated Corridor Planning process.

Implementation Tasks:

	Task	Personnel	Timeline	Status
2.1	Submit River Road Safety Improvements to AANDC for funding	Fred Bosma	June 2015	Complete
2.2	Provide MoTI with prioritized list of issue areas	Helen Reid and Alec Johnnie	Aug. 2015	Complete
2.3	Upon MoTI response, coordinate with CoD, AANDC and MoTI about roles (support, funding, etc.) for potential projects	Helen Reid and Fred Bosma or Alec Johnnie	Sept. – Dec 2015	
2.4	If necessary, work with CoD to apply for funding from other provincial/federal sources	Helen Reid and Fred Bosma or Alec Johnnie	Sept. – Dec 2015	
2.5	Develop workplan for engineering studies & construction for projects with partners' roles and timing identified	CCP Coordinator; Alec Johnnie; Angie underwood	Jan-Feb. 2016	
2.6	Construction		2016	

Strategy 3 – Make the Trans-Canada Highway safer and easier to cross and walk/ride along

EXPLANATION & RATIONALE

The Trans-Canada Highway has been the site of multiple casualties and fatalities. It cuts through Duncan, acting as a barrier to pedestrians and cyclists travelling between Cowichan Tribes residential areas and common community locations (Central Duncan amenities, the band Office, Quw'utsun' Cultural Centre, other reserves, etc.). Crossings of the highway are either unsafe and uncomfortable, or missing entirely (i.e. at Cowichan Way). Walkways are not wide enough or lack sufficient buffers from traffic to permit safe or comfortable use by a mix of pedestrians and cyclists.

Many improvements to the Trans-Canada Highway passing through Duncan are proposed in other transportation plans for the area (e.g. TCH Corridor Management Plan, Duncan Active Transportation Plan) and have the support of area partners. Talks about some of these improvements have already begun, like a pedestrian crossing at Cowichan Way, and a separated multi-use path along the east side of the highway.

DESCRIPTION

Improvements to the TCH to improve pedestrian and cyclist safety and connectivity along and across the highway. They include the following:

Type	Action	Details	Notes
Short-term	S3.1 A pedestrian controlled signal at the intersection of the Trans-Canada Highway and Cowichan Way	As described in the TCH Corridor Management Plan.	Listed in other area plans so can seek help from CoD, CVRD, ICBC, etc. Primarily MoTI responsibility; included as part of MoTI issue list.
Short-term	S3.2 A pedestrian/bicycle bridge across the Cowichan River beside the Silver Bridge	As above.	As above.
Short-term	S3.3 A multi-use path along the east side of the Trans-Canada from Boys Rd (to at least Trunk Rd)	As above.	As above.
Short-term	S3.4 Improve pedestrian safety at Boys Rd/ TCH intersection	Could include multiple activities as described in TCH Corridor management Plan: Gateway; Median Fence; Beautification; Pedestrian timers; Improved Crossings, etc.	As above.
Medium-term	S3.5 Pedestrian activated crossing of TCH at Miller Rd	At or near intersection with River Road.	Primarily MoTI responsibility; included as part of MoTI issue list.

The first three projects, particularly the crossing at Cowichan Way, are high priority for Cowichan Tribes and area partners and will involve a lot of work with multiple jurisdictions. Many of the actions are described in detail in the TCH Corridor Management Plan. As they primarily fall under the responsibility of MoTI, the role of Cowichan Tribes will be to coordinate with staff and representatives from the City of Duncan and the Municipality of North Cowichan on working with the ministry to have these projects implemented. The locations of these projects are among the issue areas already submitted to MoTI by Cowichan Tribes (Appendix 4).

Implementation Tasks:

Task		Personnel	Timeline	Status
3.1	Provide MOTI with prioritized list of issue areas	Helen Reid and Alec Johnnie	Aug. 2015	Complete
3.2	Upon MoTI response, coordinate with CoD and NC on TCH	Helen Reid and Alec Johnnie	Sept. – Dec 2015	
3.3	Convene meeting with MoTI, CoD, and NC to establish priority projects and workplan	Helen Reid and Alec Johnnie	January 2016	
3.4	Continue attendance at Cowichan Valley Traffic Advisory Committee. This committee is looking at Cowichan Way improvements.	Helen Reid	Ongoing	Ongoing
3.5	Continue to work with MoTI on improvements as needed	Helen Reid and Alec Johnnie	2016	

Strategy 4 – Make Boys Rd safer for members walking and riding their bikes

CONTEXT AND RATIONALE

The Boys Road area, including the "Sub"(i.e. Thiek , Stotlou, Mulaqw, and Khowutzun), is home to more members than any of our other on-reserve communities. Its proximity to Central Duncan and Cowichan Tribes Services on Allenby Road (a 20-30 minute walk, or 5- 10 minute bike ride) means it is well used by pedestrians and cyclists. Boys Road was also consistently identified as one of the most unsafe streets on our reserves, with members citing a lack of walkways, lighting and high-speed traffic as big concerns.

An application made for sewer improvements under Boys Road was recently approved by AANDC, to be funded under their Capital Funding. In light of this, we will be completing an additional application under AANDC'S First Nations Infrastructure Fund (FNIF) to implement mobility improvements along Boys Road for pedestrians and cyclists.

Also, Boys Road and the area on its north side are under the jurisdiction of the Municipality of North Cowichan. Any improvements will have to involve close cooperation with North Cowichan (with whom we've already started having discussions); they may also be a source of support or resources for the project, including conducting

an engineering study which would likely improve the project funding application to the FNIF. East of Mission Road, Boys Road is under MoTI jurisdiction, so where upgrades adjoin the provincial section of the road they will require approval from the ministry.

DESCRIPTION

Upgrades to Boys Road between the Trans -Canada Highway and Mission Road that will improve safety for pedestrians and cyclists travelling the road. These include walkways, additional (or improved) streetlights, signage, improved crossings, and traffic calming measures.

Type	Action	Details	Notes
Short-term	S4.1 Upgrades to Boys Road between the Trans-Canada Highway and Mission Road that will improve safety for pedestrians and cyclists travelling the road	These include walkways, additional (or improved) streetlights, signage, improved crossings, and traffic calming measures.	Timing dependent on application for sewer upgrades to Boys Rd.

NOTE: Boys Road/TCH intersection improvements included as part of S2.

Implementation Tasks:

Task		Personnel	Timeline	Status
4.1	Submit sewer upgrade application to FNIF	Fred Bosma	2015	Complete
4.2	Contact NC about potential upgrades and possible contributions (e.g., engineering study)	Helen Reid and Fred Bosma	Sept. 2015 onward	Ongoing with NC
4.3	Upon response of FNIF: submit proposal to FNIF for street safety improvements	Fred Bosma	Oct. 2015	
4.4	Upon response from FNIF: work with NC to obtain MoTI approval for project as necessary	Fred Bosma	TBD	
4.5	If second FNIF not approved, work with NC to source other funding (e.g., small community infrastructure grants)	Helen Reid/CCP Coordinator, Fred Bosma	TBD	
4.6	Work with NC to contract construction work and additional engineering studies as required.	Fred Bosma	TBD	
4.7	Construction	Fred Bosma	TBD	

Strategy 5 –Bring better transit service to the reserves

CONTEXT AND RATIONALE

After pedestrian infrastructure, improvements to on-reserve transit services was the second highest priority for members according to the Tzouhalem Corridor survey. With improved transit, they feel they will have better access to education, employment and cultural opportunities, as well as other services and amenities.

There are currently 17 stops spread among six bus routes on our reserves. According to the Tzouhalem Corridor survey and other analysis, there are two major gaps remaining for Cowichan members: Tzouhalem Road near the Stone Church and Indian Road.

DESCRIPTION

This strategy has two aspects: The first are two quickstarts aimed at helping members get access to the buses already running through their communities. The second are medium term actions, to continue improving service on reserve, including filling gaps identified on Tzouhalem Road and Indian Road.

The CVRD and BC Transit work in partnership with local transit operating companies to provide the Cowichan Valley Transit service. Six month year over year ridership figures show positive growth in route 5 ridership volumes since the October 2014 route expansion. The CVRD and BC Transit continuously monitor route and system performance and ridership.

Type	Action	Details	Notes
Quickstart	S5.1 Bus pass program	Providing rebates to members on-reserve that buy a monthly bus pass	Based on similar program operated by CoD for Duncan residents. Will need further research and approvals for budget.
Quickstart	S5.2 Communications about free bus tickets in Duncan	Using different media channels to let members know that they can get free bus tickets from QET and the local MLA's office.	See the CT *Communications Strategy* for ideas about how to get message out to different groups.
Short-term	S5.3 New bus stop locations on-reserve.	When CVRD Pilot is completed, work with CVRD to expand service to include new stops on Indian Road and Tzouhalem Road (see map below).	May require engagement to determine best location for a new stop in these areas.
Short-term	S5.4 Improved bus service on-reserve	Specifically, Schedules and frequencies for on-reserve routes that align with the needs of members. May also include bus stop upgrades (e.g. new benches)	May require additional engagement.

Implementation Tasks:

Task		Personnel	Timeline	Status
S5.1 Bus pass program				
5.1	Prepare summary of bus pass program, including costs, benefits, etc.	Helen Reid/CCP Coordinator	November 2015	
5.2	Work with necessary departments to determine feasibility/desirability of pursuing bus pass program	Helen Reid/CCP Coordinator	December 2015	
S5.2 Communications about free bus tickets in Duncan				
5.3	Consult Communications Strategy and develop appropriate materials	Helen Reid/CCP Coordinator	November 2015	
S5.3 and S5.4 New bus stops and improved service				
5.4	Discuss Cowichan transit cost-sharing	Helen Reid/Alec Johnnie	2016	
5.5	Work with CVRD on transit service expansion, including stop location and costing arrangements	Helen Reid/CCP Coordinator	TBD	

Strategy 6 - Make Tzouhalem Road Corridor safer for members walking and riding their bikes

CONTEXT AND RATIONALE

Despite the distance of some of the Tzouhalem Corridor neighbourhoods from Central Duncan and other amenities (a 45-minute walk or longer), almost 50% of people said they regularly walk or ride their bike to get around. They also made clear that the lack of separated pathways, marked intersections, and street lighting made getting around this way dangerous, stressful, and difficult. Members were able to identify numerous potential upgrades to the street network that would improve their mobility.

Tzouhalem Road is also the site of a proposed sewer upgrade to stop sewage from the Joint Utility Board from being released into the Cowichan River. The proposed sewer line runs the length of Tzouhalem Road from the sewage lagoons to WestCan Terminal, and will require a complete reconstruction of the roadway. The Municipality of North Cowichan, the Cowichan Valley Regional District, the City of Duncan and Cowichan Tribes have had meetings with MoTI regarding the proposed plan. Part of the discussion is that should the upgrade take place, a walkway, with crossings and much needed street lights, will be part of the project. In regards to this, Tzouhalem Road will need to undergo surveying by provincial surveyors before any projects begin, and it is our understanding that AANDC has agreed to fund this.

Currently, the proposed amendment to the Central Sector Liquid Waste Management Plan is going to be submitted to the Ministry of Environment in November, 2015. If successful, construction will begin in early 2017. This is why Tzouhalem Road upgrades are listed as a medium term action despite being a high priority. Other corridor improvements – like small quickstarts and any projects on side streets (e.g. Quamichan and Khenipsen) – can be started earlier.

DESCRIPTION

Type	Action	Details	Notes
Quick-start	S6.1 Address parking issue at St. Anne's Church	To prevent cars from parking on roadside, forcing pedestrians on to the street. Possible solutions includes "No Parking Sign", relocating gate, or constructing new parking lot.	
Medium-term	S6.2 Quamichan west/ east road connection	• Provides alternate, more direct route off of Tzouhalem for local residents The lack of connection also a safety concern: in emergency, there is only one exit from area	Application for culvert repair already rejected by AANDC; may need to re-frame project as larger street upgrade to fix culvert, improve safety, etc.
Medium-term	S6.3 Redevelop Tzouhalem Road to improve pedestrian and cyclist safety and connections.	• Including road re-alignment, new streetlights, signage, walkways, and crossing improvements.	Dependent on the success of the proposed amendment as discussed.

Implementation tasks:

Task		Personnel	Timeline	Status
S6.1 Address parking issue at St. Anne's Church				
6.1	Work with OM department to evaluate alternatives for St.Anne's parking issue and choose preferred option.	Helen Reid/CCP Coordinator, Alec Johnnie	Dec. 2015	
6.2	Implement preferred option for S6.1	Alec Johnnie	2016	
S6.2 Quamichan west/ east road connection				
6.3	Work with OM and Housing departments to develop workplan	Helen Reid/CCP Coordinator, Fred Bosma, Alec Johnnie	2017	
S6.3 Tzouhalem Road Redevelopment				
6.4	Continue amendment process for wastewater sewer installation	Helen Reid/CCP Coordinator, Alec Johnnie	2017	Ongoing
6.5	Work with MoTI on upgrade designs for Tzouhalem Road following sewer installation.	Helen Reid/CCP Coordinator, Fred Bosma	2017	Ongoing
6.6	Construction	Alec Johnnie	2017 and on	

Strategy 7 - Provincial Road Upgrades

CONTEXT AND RATIONALE

Many of the main roads running through our reserves lack basic infrastructure, making walking or riding around unsafe, uncomfortable and difficult. Most of these roads are also the responsibility of the Ministry of Transportation and Infrastructure (MoTI). While it is not MoTI's jurisdiction to build walkways, there are a lot of street improvements that they are responsible for that will improve safety on and near our reserves.

When MoTI learned that we were doing a transportation and mobility plan, they approached us to discuss the project more. After a meeting with several of their engineers, we were asked to submit to them a list of our priority concerns. The full submission is included in Appendix 4. While we were advised to frame the submission as 'issue areas' or 'concerns' (rather than actions), the intent was to improve safety and connectivity for members on and near Indian Road, Allenby Road, Miller Road, and Tzouhalem Road (we were informed that Boys Road is not under provincial jurisdiction).

The ministry is also not responsible for the constructions of walkways, but might be able to improve the shoulders of many streets (i.e., widening, levelling, and maintaining). Once this is done, we should be able find ways of converting the improved shoulders into separated pathways.

DESCRIPTION

Many of these improvements are very important, but because they fall under the jurisdiction of MoTI they will have to be completed according to the schedule of the ministry. This is why they have been called "medium-term" actions.

Type	Action	Details	Notes
Medium-term	S7.1 Upgrades to Indian Road, Allenby Road, and Miller Road	These include a widened and improved shoulder, (for future pathways), more streetlights, signage, improved crossings, and traffic calming measures.	Timing dependent on MoTI. While Tzouhalem is included in issues list submission, it may be completed as part of other work (See S6)

Implementation tasks:

Task		Personnel	Timeline	Status
S7.1 Upgrades to Indian Road, Allenby Road, and Miller Road				
7.1	Provide MOTI with prioritized list of issue areas	Helen Reid and Alec Johnnie	Aug. 2015	Complete
7.2	Upon MoTI response, coordinate with CoD and NC on TCH	Helen Reid and Alec Johnnie	Sept. – Dec 2015	
7.3	Convene meeting with MoTI, CoD, and NC to establish priority projects and workplan	Helen Reid and Alec Johnnie	January 2016	

Strategy 8 – Provide members with more resources and training

CONTEXT AND RATIONALE

Improving member mobility is more than fixing walkways and roadways. Sometimes what's getting in the way is when members don't have the access or skills they need to use different modes of transportation. They might want to ride a bike, but not have access to one, or know much about how to maintain one. They might even feel uncomfortable riding in traffic because they have never been taught how to do it safely.

And there are still times when the best way to get somewhere is by car. For example, an Elder trying to get to health services (one of the biggest concerns for members in the Tzouhalem Survey), the only option is to drive or be driven. Or for members working (or trying to find work), not having a car or a license can really limit their opportunities. And there are also those times when people just need a car for a couple of hours to run an errand, like going for a big shopping trip to some of the stores outside of central Duncan.

The CCP team has also begun looking into the possibility of bike building and providing general cycling education within the Cowichan community. In Duncan, there is already one program that provides these services to any youth in the area. Here, youth are able to:

- Bike BC might have educational materials or other resources, etc.
- Could be done with support from existing program, or maybe run by a knowledgeable Cowichan Member.
- Learn about bike maintenance
- Ultimately build their own bike

Quw'utsun' Employment and Training (QET) has a driver's training program for anyone with or looking for a job. But a real challenge is that even with a license, members may not have a car to practice with, or use when they get their license.

The challenge faced by a lot of members, is they may not have the resources or training they need to use a bike or car when they really need one.

DESCRIPTION

Build-a-bike program

This idea came from a Cowichan Tribes youth that took the Tzouhalem Corridor Survey; they said that if everyone was given a bike and riding around, new bike routes would have to be made.

- Details need to be researched, but could be a regular open session teaching members to fix and build their own bikes as well as about bicycle safety.

Currently, in Duncan (near the band offices), there is an existing program known as BikeWorks that is run by the Canadian Mental Health Association (CMHA). This program is geared directly towards youth, especially those who would otherwise lack the resources to get themselves a bike. Our goal is either to get our members using this program, or initiate a similar one within the Cowichan youth

community. Through correspondence with the youth centre, we will determine which of these options will work best for our members.

Auto-Mobility Program

Intended to address a range of mobility issues by helping members get their licenses and have better access to cars (driving or being driven). The program has four related pillars:

- ***QET's driver training program***
  The current driver's training would be the entry point for members coming into the program. The other three pillars build off and support this one.
- ***A Cowichan Tribes Auto co-op***
  Car co-operatives are becoming more and more common. They allow people access to a range of automobiles at a fraction of the cost of owning their own. This would be the only First Nations Car co-op in Canada, and would give our members the access they need to cars to be able to learn how to drive and get their license. Once they have their license, the car co-op will let them do the things that can only be done with cars (job hunting, going to doctor's appointments, etc.).
- ***A driver training mentorship program***
  Linking new drivers up with experienced drivers to help them get the training time they need to get their license. Co-op cars can be used for people to get practice.
- ***A volunteer driver service***
  Upon receiving their new licence and support in accessing co-op cars, new drivers would be asked to volunteer for a set period to help drive Elders and other members with limited mobility to essential appointments (like doctor's visits, etc.)

Type	Action	Details	Notes
Short-term	S8.1 Build-a-bike Program	A regular "workshop" where members can learn about bike maintenance and road safety, and ultimately build their own bike.	Need research and staff engagement to determine details of program.
Short-term	S8.2 Auto-mobility Program	A four-pillar program to help members get licenses and access to cars through a Cowichan Tribes car co-operative. Would involve mentorship for driver's training and a volunteer program for new driver's to help Elder's get to essential appointments.	Need research and staff engagement to determine details of program and feasibility. A lot of resources available through the Canadian Auto Network.

Implementation tasks:

Task		Personnel	Timeline	Status
S8.1 Build-a-bike Program				
8.1	Liaise with Youth Centre coordinator, other relevant community members to discuss feasibility/desirability of program.	CCP Coordinator	TBD	
8.2	Dependent on results from meetings as mentioned above, meet with community build-a-bike initiatives to discuss partnership/provision of services.	CCP Coordinator	TBD	
8.3	Work with organizations such as BikeBC to provide community with more/better cycling information.	CCP Coordinator	TBD	
S8.2 Auto-mobility Program				
8.4	Pillar 1: Liaise with Friendship Centre and Coast Salish Employment & Training Society (CSETS) to better understand their driver's training programs.	CCP Coordinator	Fall 2015	
8.5	Pillar 2: Internal research on car co-op program.	CCP Coordinator	Dec. 2015	
8.6	All pillars: Liaise with internal partners of auto-mobility program (primarily Quw'utsun' Employment & Training or QET) to refine program goals.	CCP Coordinator, Helen Reid	Dec. 2015	
8.7	Pillar 2: Organize presentation to Chief and Council for car co-op pilot project.	CCP Coordinator	Early 2016	
8.8	All pillars: Conduct community surveys to gauge awareness of driver's ed, interest in car co-op, and subsequent volunteer driving programs.	CCP Coordinator, Helen Reid	TBD	

SECTION 5:

Area transportation profile

5.1 Studies and engagement

The following information about our transportation network and Cowichan Tribes members input came from many different sources, some produced by Cowichan Tribes, some produced by other jurisdictions in the area, like the City of Duncan, BC Transit, and the BC Ministry of Transportation and Infrastructure (MOTI). These sources are summarized below:

WULH NI' KWELHS UY YEK SOS 'O" THU THI: TIME OF CHANGE – COWICHAN TRIBES COMPREHENSIVE COMMUNITY PLAN (2014)

In 2014 we completed our Comprehensive Community Plan (CCP). A major concern for members was street safety, so as part of the CCP we started work on a community Transportation and Mobility Plan. The work resulted in a map of the general areas of concern that members said stopped them from being able to get around safely and comfortably. Action 1a) from the CCP was to build on this work and make a more complete Community Transportation and Mobility Plan.

TZOUHALEM CORRIDOR COMMUNITY SURVEY (2015)

In February and March of 2015, the CCP team developed and delivered a door-to-door community survey for the Tzouhalem Road Corridor Plan. The survey was delivered to 32 members living along Tzouhalem Road and adjoining streets. The survey had 22 questions asking participants about how they get around, transportation problems in the area, and what they'd like to see fixed first. The survey was delivered with maps so that members could point out the areas they were talking about.

The full survey and results can be found in Appendices 2 and 3.

SAFETY IMPROVEMENTS – CPMS11535: EDUCATION AND SPORTS COMPLEX

A study of River Road and the surrounding area was commissioned by Aboriginal Affairs and Northern Development Canada (AANDC). It includes a series of recommendations for improving the safety of the area while also offering more recreational opportunities. Transportation-specific recommendations include improvements to roads and intersections; the addition of walkways, streetlights, crosswalks, and a bus stop. These recommendations have been included in this transportation and mobility plan.

TRANS-CANADA HIGHWAY CORRIDOR MANAGEMENT PLAN (2014)

The Trans-Canada Highway Corridor Management Plan (CMP) was prepared for the City of Duncan (CoD), District of North Cowichan (DNC), and the Ministry of Transportation and Infrastructure (MoTI). It outlines a series of infrastructural upgrades to the section of the Trans-Canada Highway running between Boys Road and Beverly St. The plan included consultation with the local public, business owners, municipalities, transportation authorities, and Cowichan Tribes.

DUNCAN AREA ACTIVE TRANSPORTATION PLAN (2014)

The Duncan Area Active Transportation Plan (ATP) outlines a series of policy, programming and infrastructure recommendations to improve safety and community connectivity for people travelling by foot, bicycle and any other self-propelled method of getting around. The plan covers much of Duncan, central parts of Cowichan Tribes' land, and portions of North Cowichan. The recommendations were chosen to improve safety, connectivity, and user-experience.

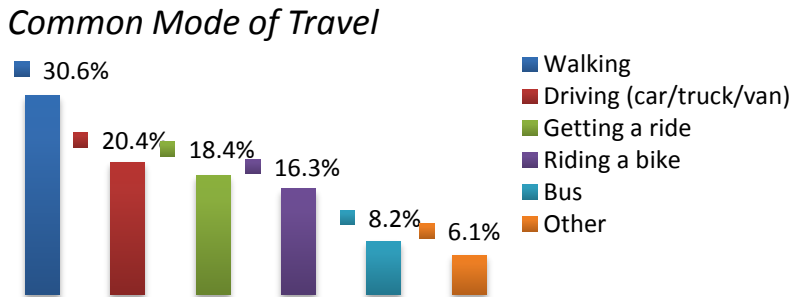
The ATP is the result of a comprehensive planning effort involving Cowichan Tribes, the City of Duncan, and the Municipality of North Cowichan.

COWICHAN VALLEY TRANSIT FUTURE PLAN (2012)

The Cowichan Valley Transit Future Plan was developed with participation from Local Government, First Nations and community stakeholders collected in 2011. Meetings were held in early 2011 with the Malahat First Nation, Cowichan Tribes, and Chemainus First Nation. The vision and goals of this 25-year plan are as follows.

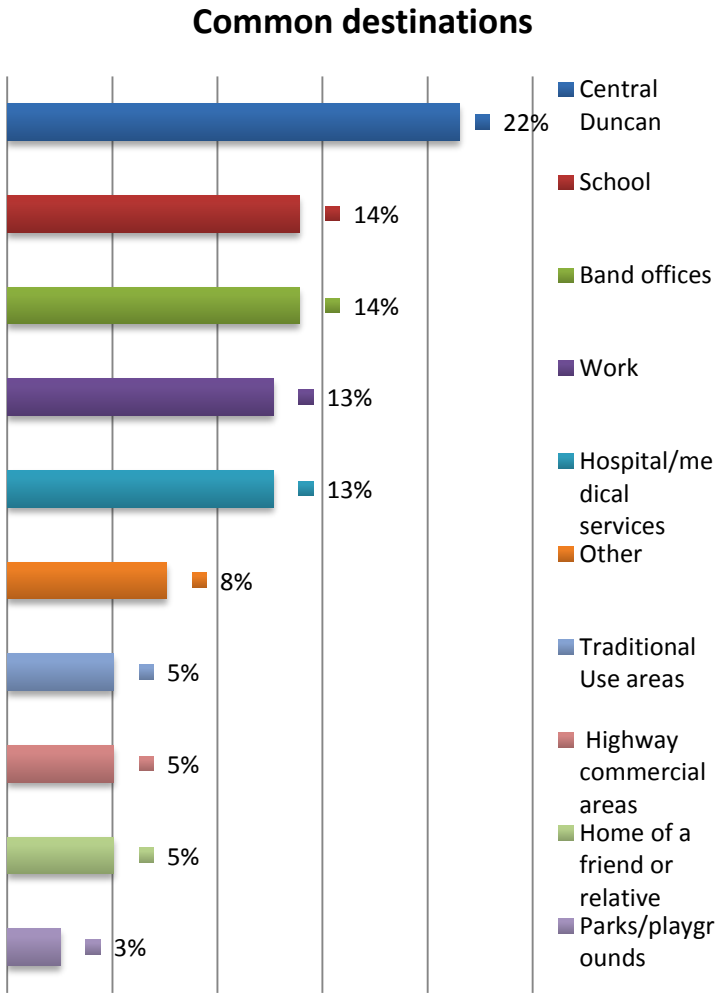
5.2 Mode Share and Travel Habits

A lot of Cowichan Tribes members use Active Transportation modes (walking and cycling) to get around. Approximately 47% of members identify walking or cycling as their most common mode for all trips.[1]

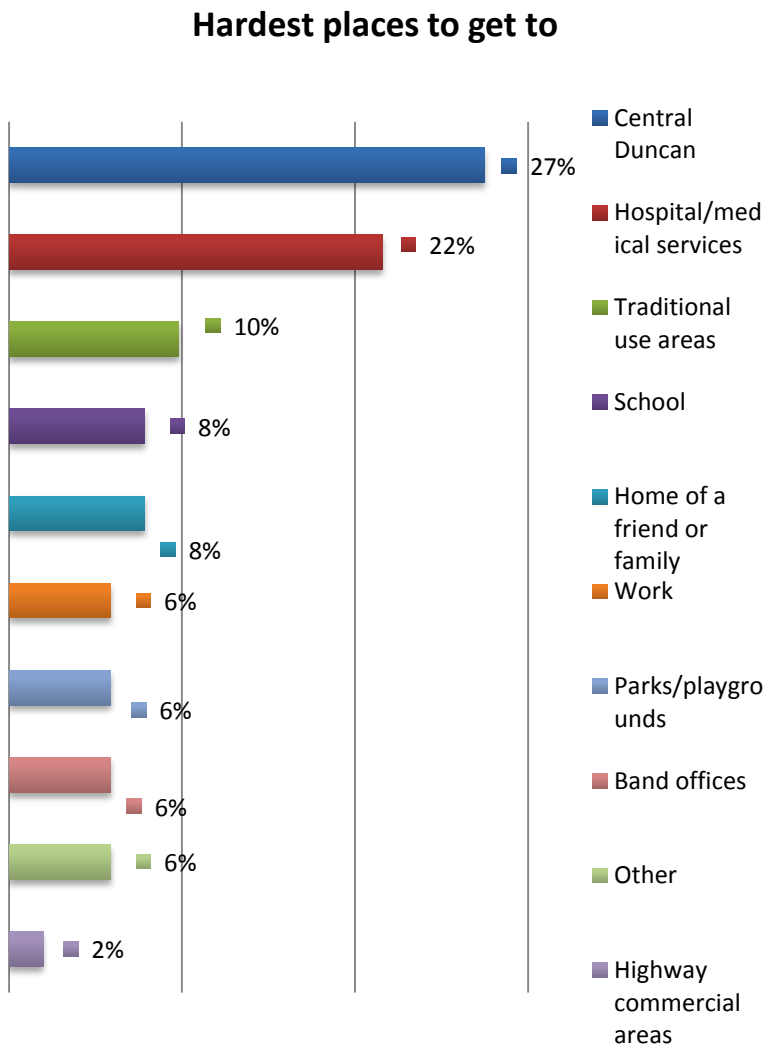


[1] All data in this section is from the Tzouhalem Rd. community survey unless stated otherwise.

This could come from Duncan's urban form, which is compact, making it easier to walk from place to place because people live quite close to the places they usually go.



Unfortunately, this isn't always enough to make it easy to get around. For CT members, some of the most common destinations are also the hardest to get to, including central Duncan, schools, and medical services.



5.3 Service level Assessment by Mode

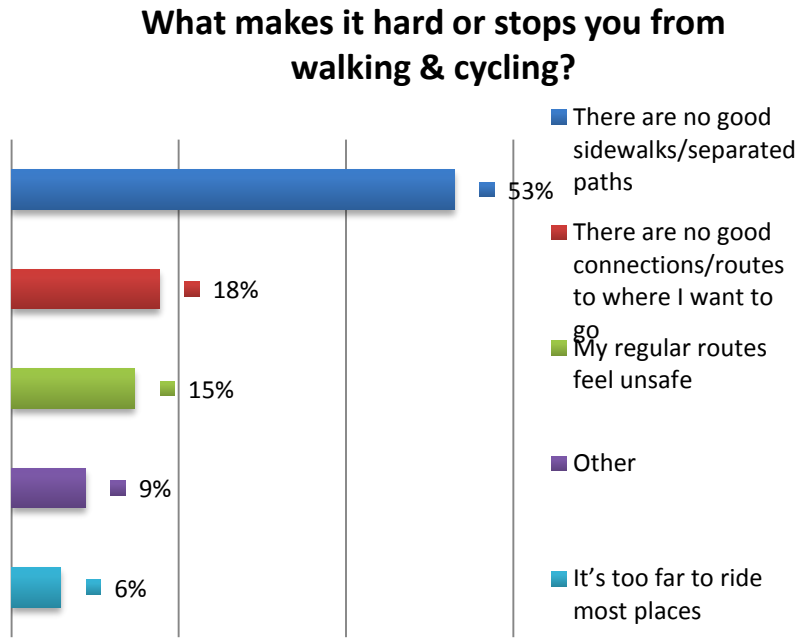
The following assessment of each mode of transportation draws from engagement with CT members and analysis from this and other relevant studies.

5.3.1 ACTIVE TRANSPORTATION

While walking and cycling are the most common way of getting around for nearly 50% of members, the conditions of the network on and off-reserve make it difficult, uncomfortable, or dangerous to use these modes.

During engagement for the CCP and community safety meetings, members identified different aspects of streets feeling unsafe as a priority concern. In terms of active transportation, the main issues were a lack of separated walkways or pathways, high traffic speeds, and a lack of street lighting.

According to the Tzouhalem Rd. member survey, by far the biggest restriction to members walking or cycling was the lack of walkways or pathways.


What makes it hard or stops you from walking & cycling?
53%
18%
15%
9%
6%
There are no good sidewalks/separated paths
There are no good connections/routes to where I want to go
My regular routes feel unsafe
Other
It's too far to ride most places

This issue, and the second and third ranked issues (lack of connections, feeling unsafe), are all interrelated, contributing to a general shortcoming of the AT network to serve members' needs.

This is the case for the off-reserve portion of the network as well. The Duncan Area Active Transportation Plan identifies a number of gaps in the pedestrian and cycling networks throughout Duncan, due to the poor conditions or lack of walkways and pathways, infrequent or dangerous street crossings, poor street lighting, and high traffic speeds.

While there are a few trails being developed in the area, a complete network of pedestrian/bicycle dedicated pathways or trails does not exist.

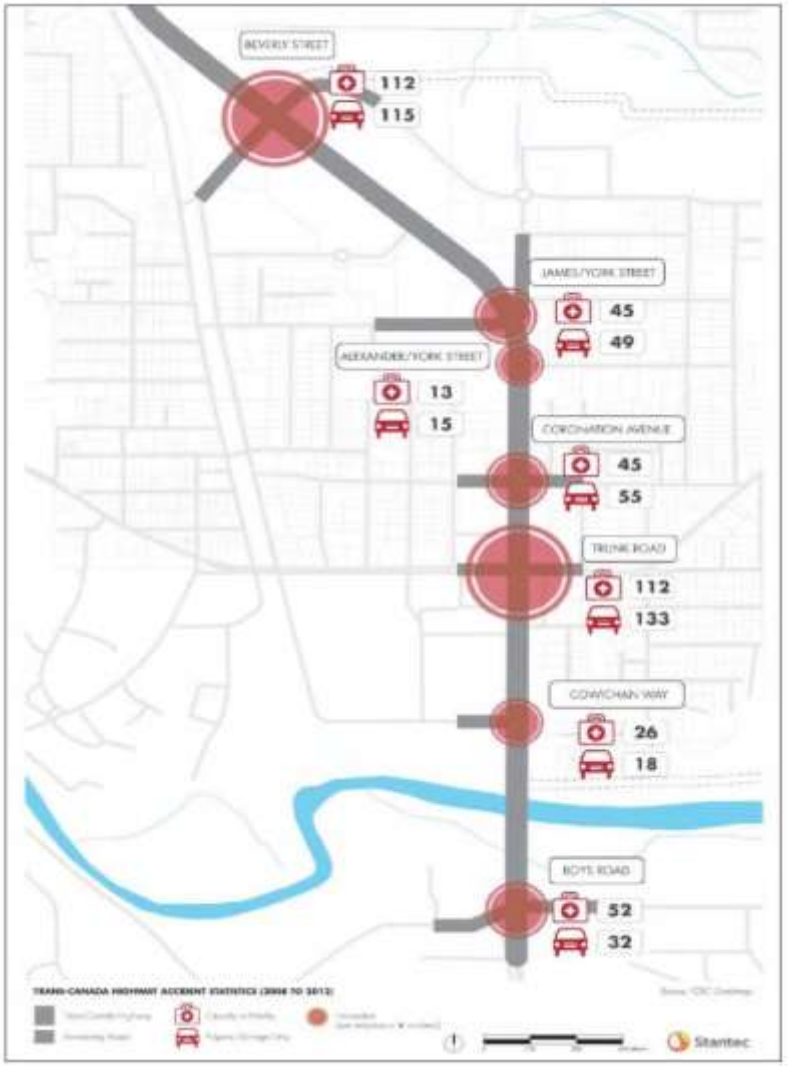
The following problem locations identified in the Duncan Area AT plan are considered directly relevant to Cowichan Tribes:

- Tzouhalem Rd and Allenby Rd. noted for lacking pedestrian walkways
- Tzouhalem Rd Bridge noted for lacking shoulders and high vehicle speeds
- Allenby Road and Miller Road noted as being 'poor' condition, with sporadic shoulders and poor pedestrian lighting.
- Noted that "Few formalized crossings exist along collector and arterial roadways outside of downtown, and are particularly infrequent on Allenby Road, Tzouhalem Road, and the Trans-Canada Highway"
- Tzouhalem Rd.: "Tzouhalem Road provides connections to and from residential areas to destinations along Trunk Road and to the Cowichan Tribes Urbanized area. The roadway has intermittent narrow shoulders and no continuous bicycle or pedestrian facilities, which equates to poor quality travel conditions. The narrow bridge crossing east of Lakes Road increases the collision risk for cyclists and pedestrians sharing roadway space with motor vehicles."3-34
- Cowichan Tribes Offices: "Situated off Allenby Road, the Cowichan Tribes Office may be challenging for people who walk or bike, as the [walkway] is incomplete and the roadway is not marked for cyclists. The quality of the roadway surface can create challenging travel conditions for cyclists and pedestrians."3-35

The TCH Corridor Management Plan also reports that active transportation facilities and walkways are outdated for the population and land use of Duncan Area and that existing walkways are often too narrow and uncomfortable (i.e. they abut busy roadways) to support cycling. While there are a few trails being developed in the area, a complete network of pedestrian/bicycle dedicated pathways or trails does not exist.

Above all, the TCH acts as a significant barrier to all pedestrian and cycling traffic moving along the east/west axis, causing critical network gaps. Infrequent crosswalks, high traffic speeds, and poor walkways disrupt popular routes, make for uncomfortable walking and cycling conditions, and put many pedestrian and cyclists in harm's way. The following ICBC collision data illustrates this well.

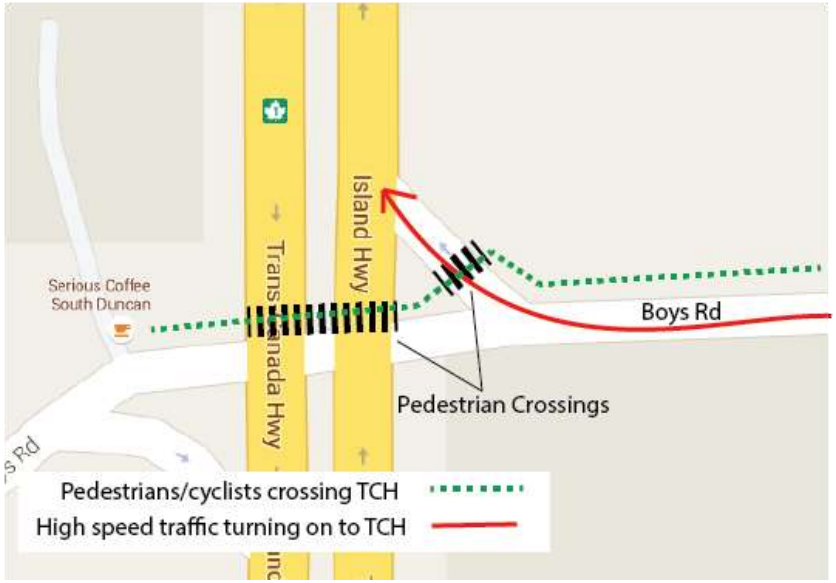
Figure: TCH Corridor Collision Data



Source: TCH Corridor Management Plan (2014) Figure 2-2 (data from ICBC.com)

The three southern-most intersections (Trunk Rd., Cowichan Way, and Boys Rd.) are all likely connections between major Cowichan Tribes residential areas (Boys Rd. and Tzouhalem Rd.) and common destinations in central Duncan. The crossing at Cowichan Way has no pedestrian crossing; the channelized right turn at Boys Rd. allows traffic to maintain high speeds as it merges with the TCH, and forces pedestrians and cyclists to cross two major roads instead of just one.

Figure 1: Boys Rd. channelized right turn

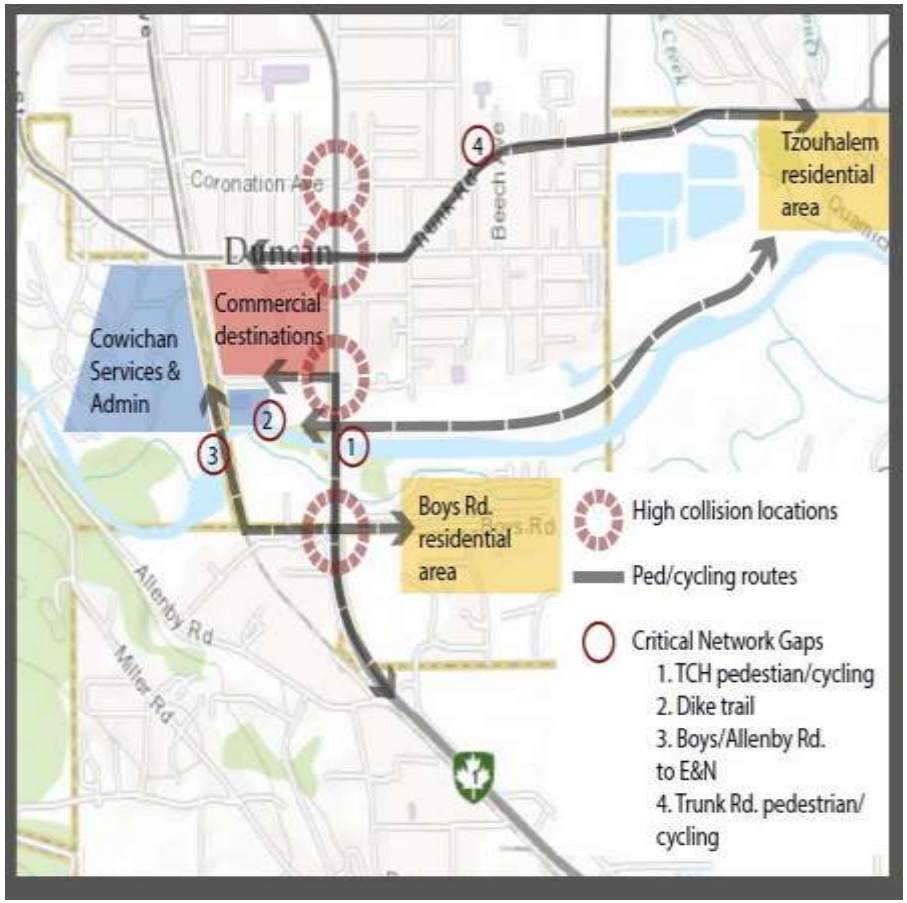


At the Cowichan Way and Boys Rd intersections, the proportion of the collisions that results in casualty or fatality is higher than anywhere else along the corridor study area. This may suggest a higher number of risky pedestrian crossings. Given the location of these intersections along a route linking central Duncan with the Boys Rd. neighbourhood, there is concern that a number of these accidents could involve Cowichan Tribes members.

Table 1: TCH collisions by property damage and casualty/fatality

Collisions along TCH			
Intersection	**Property Damage**	**Casualty or Fatality**	**Proportion of collisions that result in Casualty or Fatality**
James/York St.	49	45	48%
Coronation Ave.	55	45	45%
Trunk Rd.	133	112	46%
Cowichan Way	18	26	59%
Boys Rd.	32	52	62%

The conclusion that can be drawn from this analysis is that Cowichan Tribes residential areas lack proper pedestrian and cycling connections with Duncan and other parts of the reserve, blocking many members from safe access to their daily destinations, such as shops, schools, health care, friends and family, and Cowichan Tribes services and cultural amenities.



5.3.2 TRANSIT

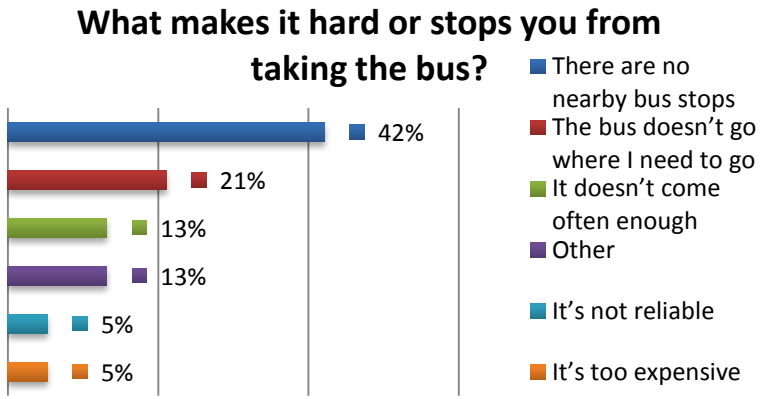
Most bus routes servicing Duncan converge on downtown and Village Green Mall, but are indirect, and with timetables and circulation that are difficult to understand.

Existing local service is provided on the majority of routes until 7:30 pm on weekdays and 5:00 to 6:00pm on weekends. Weekend service is generally very limited in terms of frequency and hours of operation, often routes only operating a few times a day.

The Cowichan Valley Commuter is an inter-regional bus service connecting the Cowichan Valley to downtown Victoria on weekdays during peak morning and afternoon hours. The service consists of two lines – the 66 Duncan Commuter and the 99 Shawnigan – operating along Highway 1 with limited stops, and sharing commons stops with the Greater Victoria service. Morning trips leave Cowichan Valley to Victoria between 5:30 and 6:30 am, and return trips leave Victoria from 3:45 to 5:15pm.

As part of First Nations engagement for the Cowichan Valley Transit Future Plan, meetings were held in early 2011 with the Malahat First Nation, Cowichan Tribes, and Chemainus First Nation. One of the findings that arose from these meetings was that reserve residents from Cowichan Tribes often experience transportation barriers including limited access to the existing transit system.

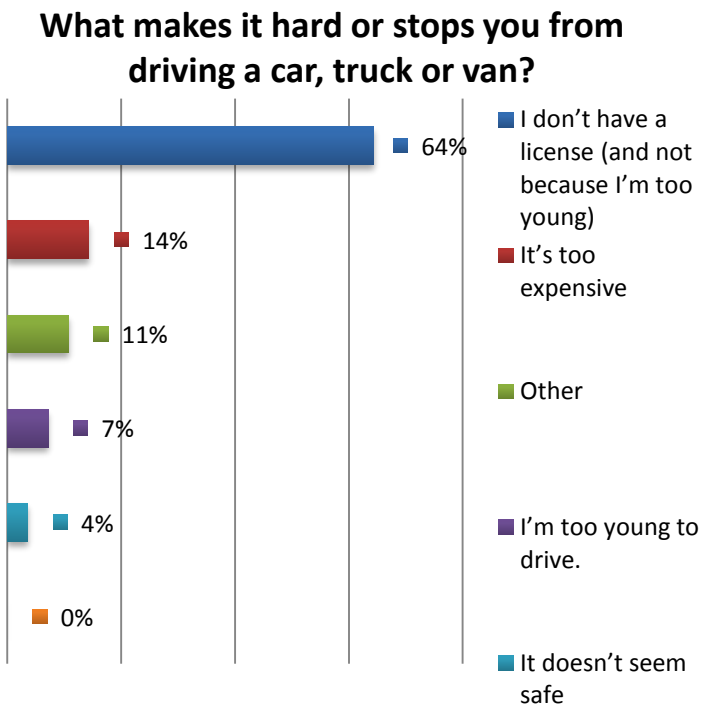
The Tzouhalem Rd. Survey had similar findings; a lack of nearby bus stops was cited as the biggest challenge to taking the bus.



5.3.3 DRIVING

With the exception of a few improvements to road conditions (See Section 7: Tzouhalem Road Corridor Plan), automobile traffic is generally identified as a problem for other modes (i.e. high speed traffic makes walking and cycling uncomfortable and dangerous). But until service levels and conditions improve for AT and transit, using a personal automobile is the best option for getting around.

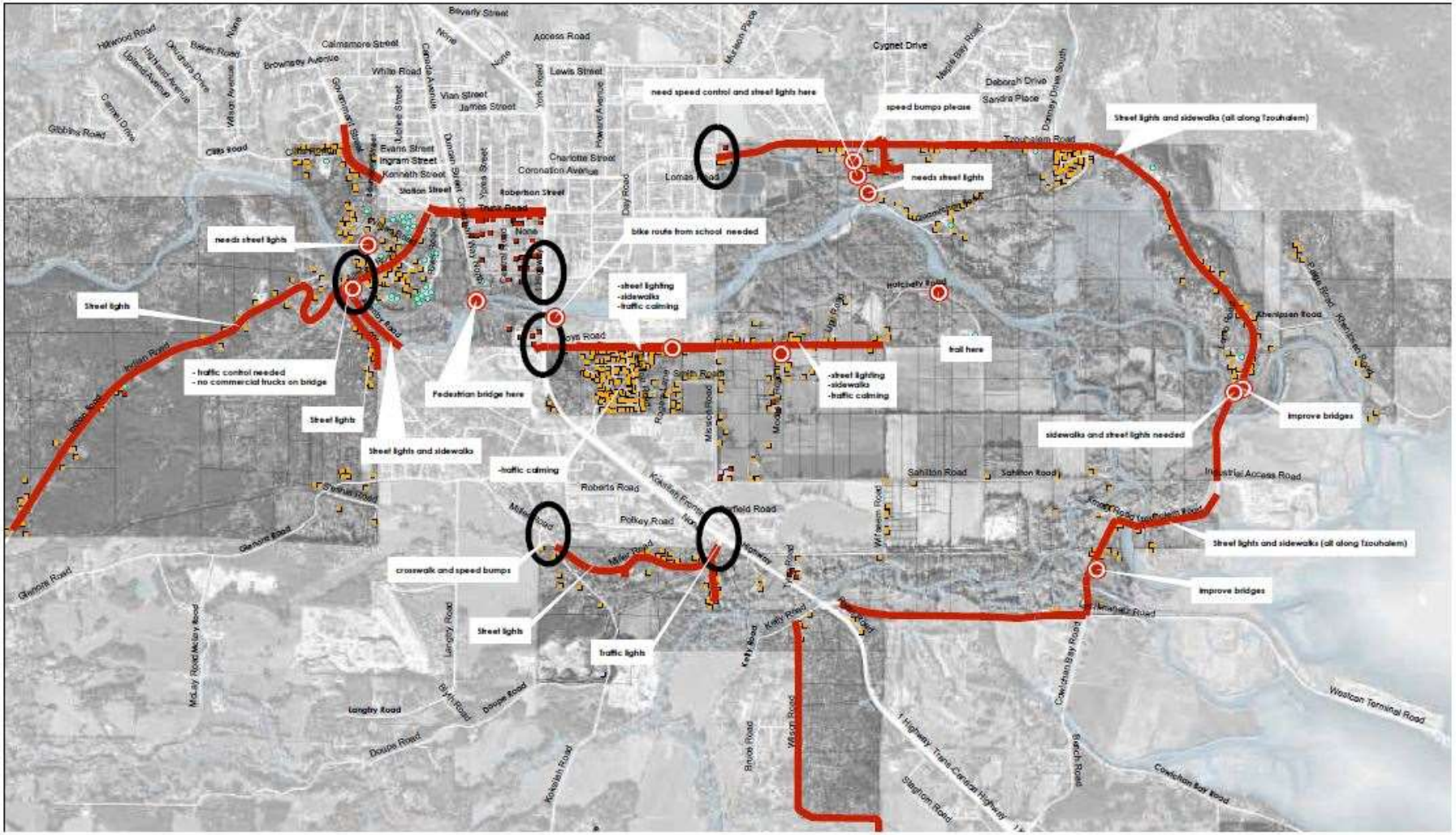
Of the members surveyed as part of the Tzouhalem Rd. study, 20% of members drive to get around, and another 18.5% get rides. When asked what makes it hard or stops them from driving, the single most dominant reason was not having a license (64%); nobody said it was because they did not want to drive.



Those that said 'other' cited not having a car, or medical reasons as preventing them from driving.

Appendices

Appendix 1: CCP Transportation and Mobility Map



Appendix 2: Tzouhalem Community Survey

SECTION 1: YOUR TRANSPORTATION HABITS

1. What is your gender?

a) Male
b) Female

2. How old are you?

a) Under 10
b) 11 to 20
c) 21 to 30
d) 31 to 40
e) 41 to 50
f) 51 to 60
g) 61 to 70
h) Over 70

3. Where do you live?

a) Quamichan
b) Stone Church Area
c) Clem Clem area
d) Green Point

4. Where do you usually go day-to-day locally?

a) School
b) Work
c) Duncan's central shopping area
d) Parks/playgrounds
e) Traditional use areas (harvesting grounds, sacred sites)
f) Highway commercial areas
g) Band offices
h) Hospital/medical services
i) Home of a friend or relative
j) Other:_____

5. How do you usually get around? Select all that apply.

a) Walking
b) Riding a bike

c) Bus
d) Driving (car/truck/van)
e) Getting a ride
f) Other (please explain):_____

6. Is there anywhere you regularly go that is farther away (e.g., other parts of the island)?

7. How well can you get around?

a) Great! I can always go where I want, the way that I want.
b) Good. I can almost always go where I want to, somehow or other.
c) So-so. I can usually go where I need to, but it takes some effort.
d) Not good. It's hard to go where I need to, and sometimes I miss out on things because of it.
e) Terrible. It's really hard to get around and I can't do a lot of things I want and need to do.

Comment:

8. What places are the hardest for you to get to/from?

a) School
b) Work
c) Downtown Duncan
d) Parks/playgrounds
e) Traditional use areas (harvesting grounds, sacred sites)
f) Highway commercial areas
g) Band offices
h) Hospital/medical services
i) Home of a friend or family
j) Other:_____

Comment:

9. If anything, what do you think you miss out on because it is hard to get around?

a) Seeing friends and family
b) Recreation (sports, hiking, canoeing, time at parks or playgrounds)
c) Work (Job opportunities or extra shifts)
d) Education
e) Community/cultural activities
f) Getting out on the land/water
g) Doctor's appointment/ Medical Laboratory(blood tests ,x-rays)
h) Other (please explain):_____

10. What makes it hard or stops you from walking/cycling?

a) There are no good sidewalks/separated paths
b) There are no good connections/routes to where I want to go
c) It's too far to ride most places
d) My regular routes feel unsafe (please explain)
e) Other(more specific)

If walking or riding a bike was safer, more comfortable and more convenient where would it help you go?

11. What makes it hard or stops you from taking the bus?

a) There are no nearby bus stops
b) The bus doesn't go where I need to go
c) It doesn't come often enough

d) It's not reliable
e) It's too expensive
f) Other (please explain):

If bus service was improved, where would it help you go?

12. What makes it hard or stops you from driving a car/truck/van?

a) I'm too young to drive.
b) I don't have a license (and not because I'm too young)
c) It's too expensive
d) It doesn't seem safe
e) I don't want to drive.
f) Other (please explain):

If you had access to a car and could drive, what would it help you do that other modes of transportation cannot?

SECTION 2: MARINE

13. What makes it hard or stops you from using marine craft (motorboats, canoes, etc.)?

a) I don't need or want to.

b) I don't have a license
c) It's too expensive
d) It doesn't seem safe
e) I can't get to a boat launch/marina/canoe shed
f) Other (please explain):

If you had access to marine craft, what would it help you do that other modes of transportation cannot?

Section 3: IMPROVEMENTS/ SAFETY

14. Thinking about what would be best for the community, which places is it most important to be able to get to? Choose your top three.

a) School
b) Work
c) Downtown Duncan
d) Parks/playgrounds
e) Traditional use areas (harvesting grounds, sacred sites)
f) Highway commercial areas
g) Band offices
h) Hospital/medical services
i) Home of a friend or family
j) Other:_____

Comment:

15. Thinking about how you answered the last question, which way of getting around should be improved first? Choose your top two.

a) Walking
b) Riding a bike
c) Taking the bus

d) Driving a car
e) Marine craft (e.g., motorboat, canoe)
f) Other (please explain):

Comment:

16. How safe is it getting around on Tzouhalem Road?

a) Really safe. I don't worry about anyone walking, biking, or driving anywhere at any time, day or night.
b) Pretty safe. People can safely walk, bike or drive in the day time.
c) Not very safe. It's ok driving, but it's not very safe walking or biking, especially at night.
d) It's dangerous! Walking or biking at any time is dangerous, and it is not that safe driving in bad conditions (dark, rainy).

Section 4: MAP

Take a look at the map and use it to help you answer the next few questions about the Tzouhalem Road are and the larger community.

17. Think about walking, riding a bike, or driving. Show what areas are:
a) Unsafe
b) Hard or uncomfortable to use
c) Make getting around inconvenient

18. Are there any other obstacles you face when trying to get around? Show them on the map.

19. Which improvements do you think should be done first and where should they be done?

a) Separated sidewalks/paths for walking and cycling

b) Improved road conditions

c) Flood protection for certain parts of the road

d) Speed controls/traffic calming

e) Better lighting

f) Better bus service

g) Better connections to other areas (e.g. Duncan,)

h) Bridge repairs/upgrades

i) Better parking at public locations

j) Other (please explain):

20. Are there any other ways that different areas could be better connected to each other?

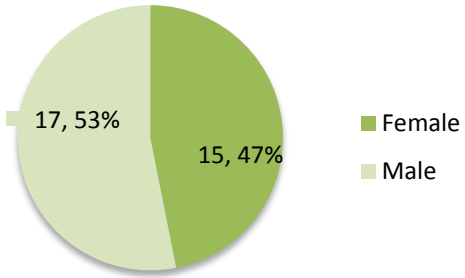
21. Is there anything else that could make getting around easier for you or other people (e.g. youth, Elders, people with disabilities)?

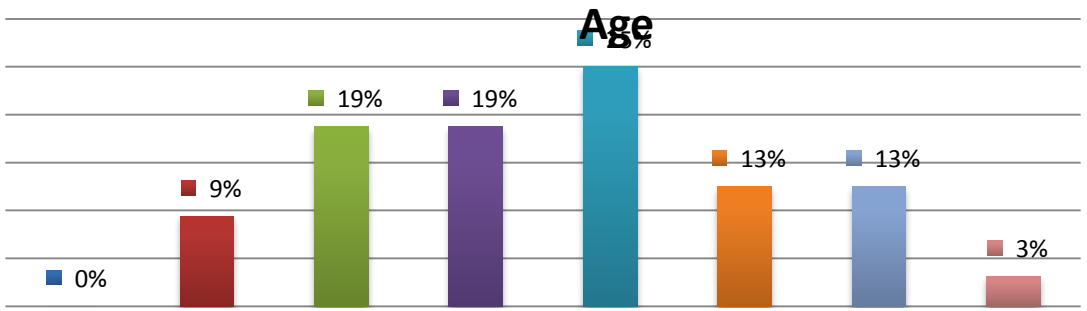
Fruit Trees. Do you have:

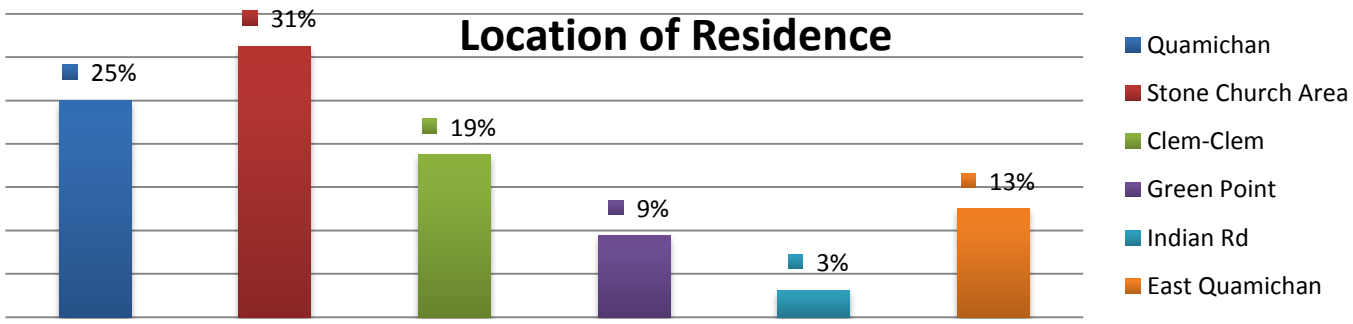
1. Apple Trees
2. Pear Trees
3. Cherry Trees
4. Plum Trees

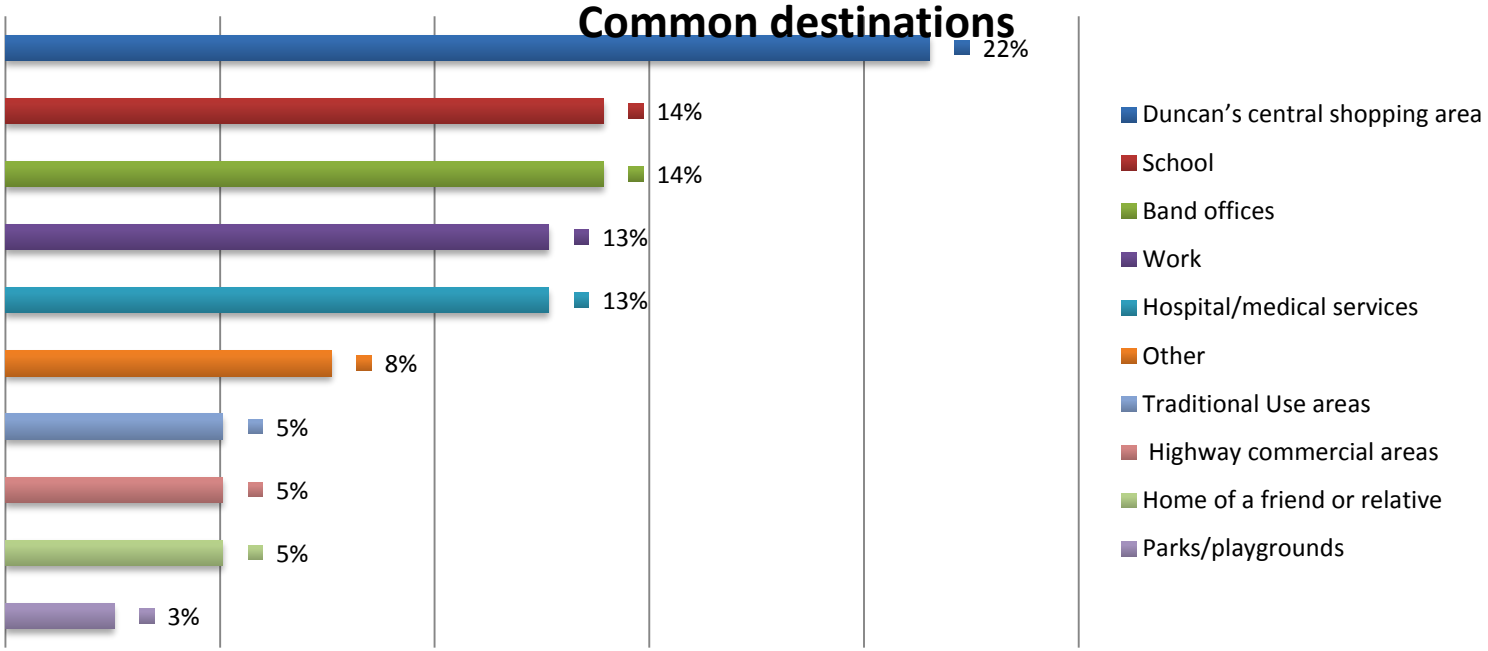
Appendix 3: Tzouhalem Community Survey Results

Who was surveyed and what are their travel habits?



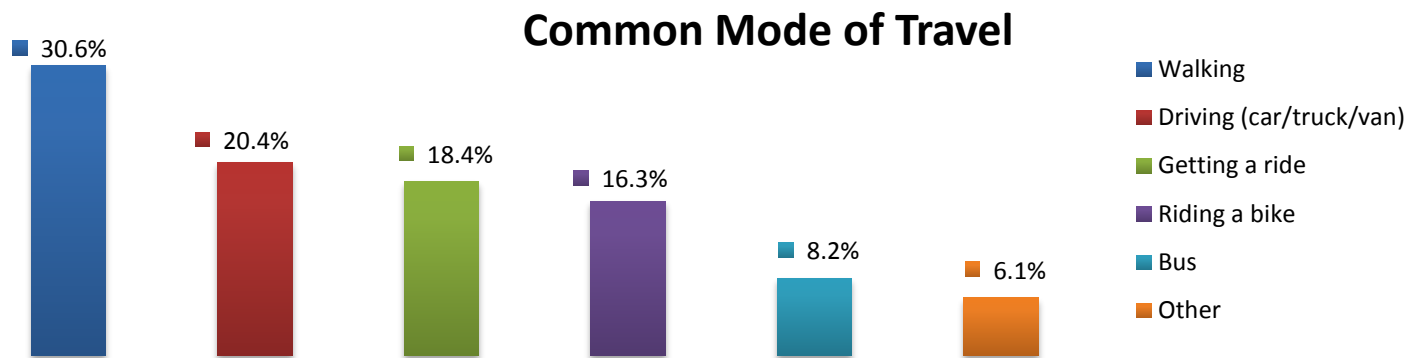






Under "Other":

- Walks
- Timmies and errands
- 7-11 on Tzouhalem
- Walmart



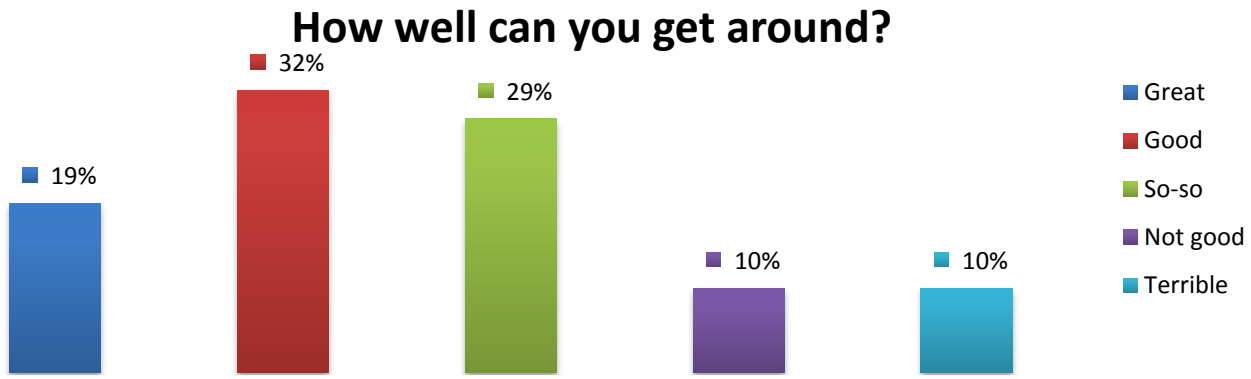
Under "Other":

- Medical services
- Hire niece

Is there anywhere you go that is farther away?

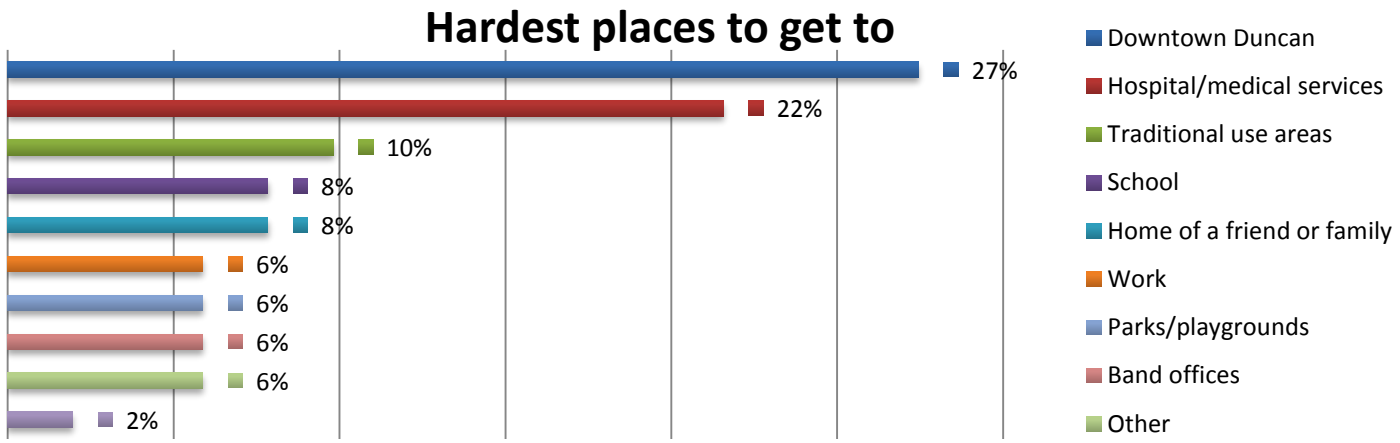
- Shell beach in Ladysmith
- Victoria
- Appointment at the office
- Victoria once a month
- Nanaimo and Victoria to see friends
- Walmart
- Recreation activities, go out of town
- Chemainus; bus route
- Victoria, Cancer Centre
- Out of town work
- Visit Nanaimo, Victoria

What do they think of our current system?



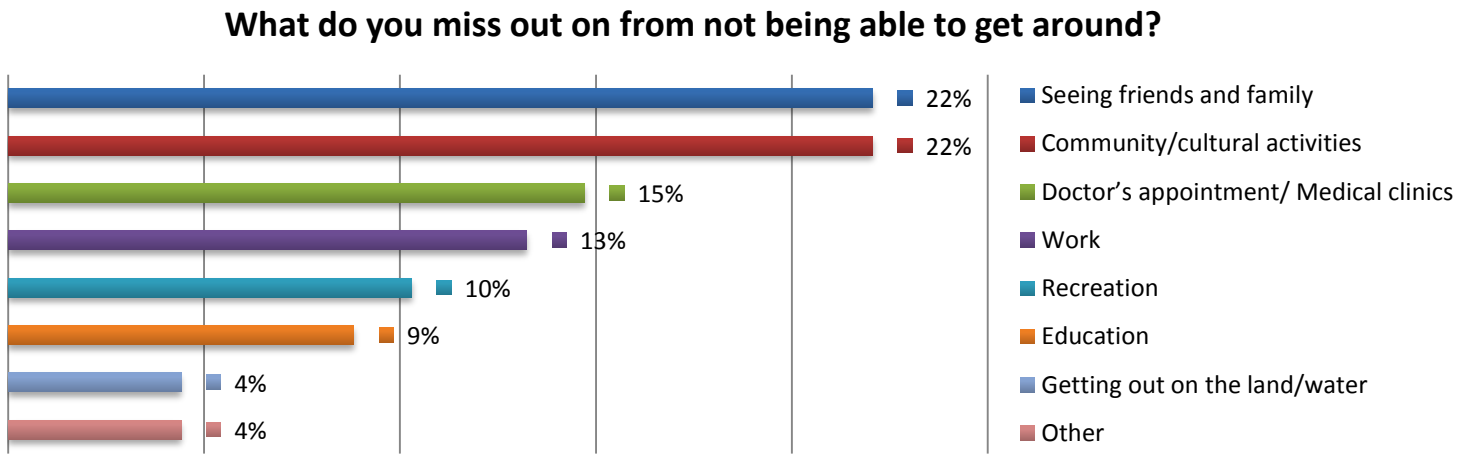
Under "Comments":

- Back – medical reasons
- Hard when I want to go right away
- Medical (knee), weather
- Finding a ride



Under "Other":

- Appointments
- Usually walk or catch a ride
- Late night – reflectors
- Friends
- Bath pools, medical
- Nowhere. I can get everywhere with my car
- VIU
- Victoria Drs appointment



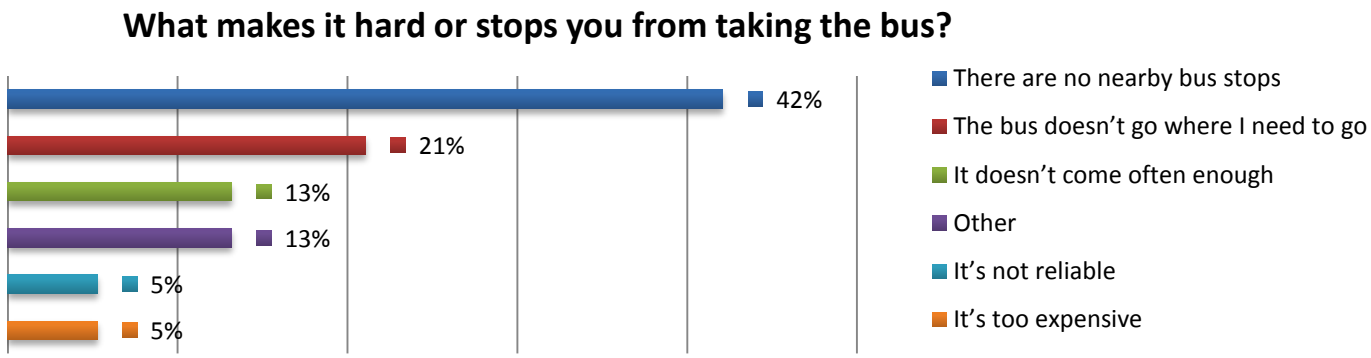
Under "other":

- Events
- After hours – non-Cowichan
- Events at QCC- gym BH
- Medical

What makes it hard or stops you from walking & cycling?
53%
18%
15%
9%
6%
There are no good sidewalks/separated paths
There are no good connections/routes to where I want to go
My regular routes feel unsafe
Other
It's too far to ride most places

If walking or riding a bike was safer, more comfortable and more convenient, where would it help you go?

- IDK
- To work, school, visit family
- All over
- Can't ride a bike – medical reasons
- Medical
- Walking home after work, after school
- School
- To town
- Travel – in-laws, family, easier to BH
- Not bad, can get to it
- Shopping, Church
- To town, shopping, seek employment
- Parks for the kids, town, family
- Shopping out of town (Walmart)
- To town, more access, half hour ride
- For walks
- Biking to town, exercise
- Visiting family down the road
- Daily walks
- Around the area and the bay
- No need
- Just out for exercise
- To Cowichan Bay



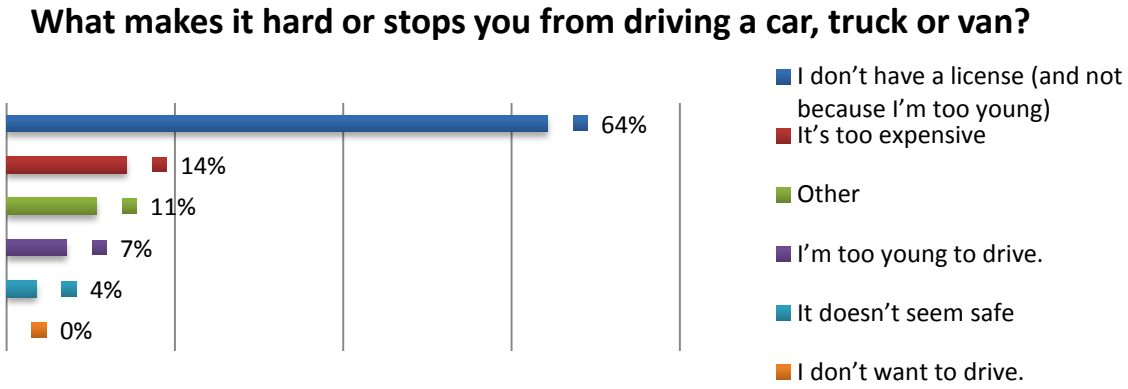
Under "other":

- Not really hard – bussing to town
- When needed and have the money
- Read the bus times
- Cheper - $8 for 2 one way – need $16/day
- Wife has to walk to Valleyview Rd bus stop

If bus service was improved, where would it help you go?

- Town for groceries
- To town
- To town, school, look for work
- Town, school, friends, then home again
- To town and school
- To town and everywhere
- Everywhere
- Go to AP, shopping at Walmart and Superstore
- Need one to town
- Town, gain full education and employment

- Town – wife does the shopping
- Everywhere
- Downtown Duncan and Cowichan Commons
- Yes, would use the Transit bus
- To school, work, town
- Work/cultural events



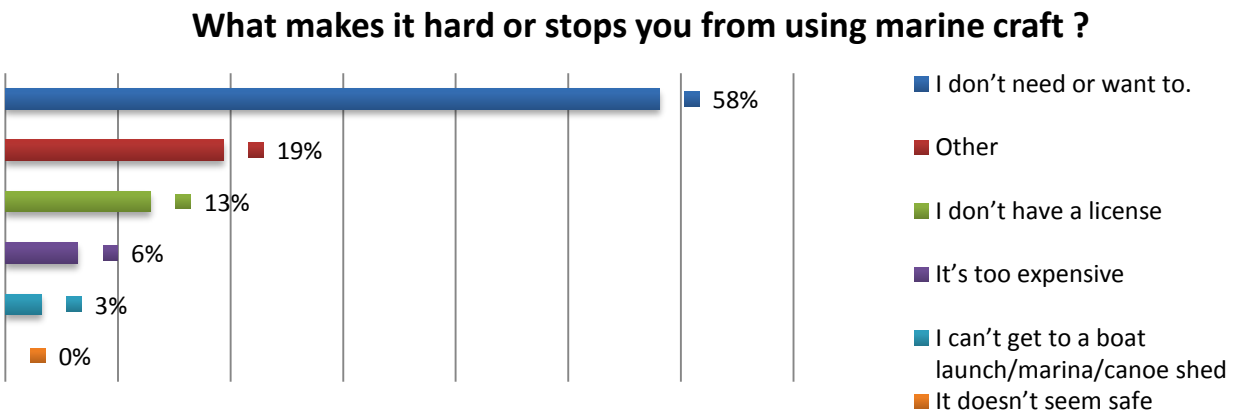
Under "other":

- No car
- Don't have a car
- Medical –prohibited
- Gas prices

If you had access to a car and could drive, what would it help you do that other modes of transportation cannot?

- get places sooner, easier and safer
- To young
- find work and see friends

- everywhere
- Gain full time employment
- It would help other families go to town and back
- A car would feel much safer than walking
- Shop
- School, work
- family rides
- go out of town to other parts of the island
- Easier to get to jobs, more shifts
- Rides
- visit family and go shopping; own transportation for doctors.
- Doctors and shopping
- be on time/independent



Under "other":

- Youth
- Don`t have a boat
- Not at this time

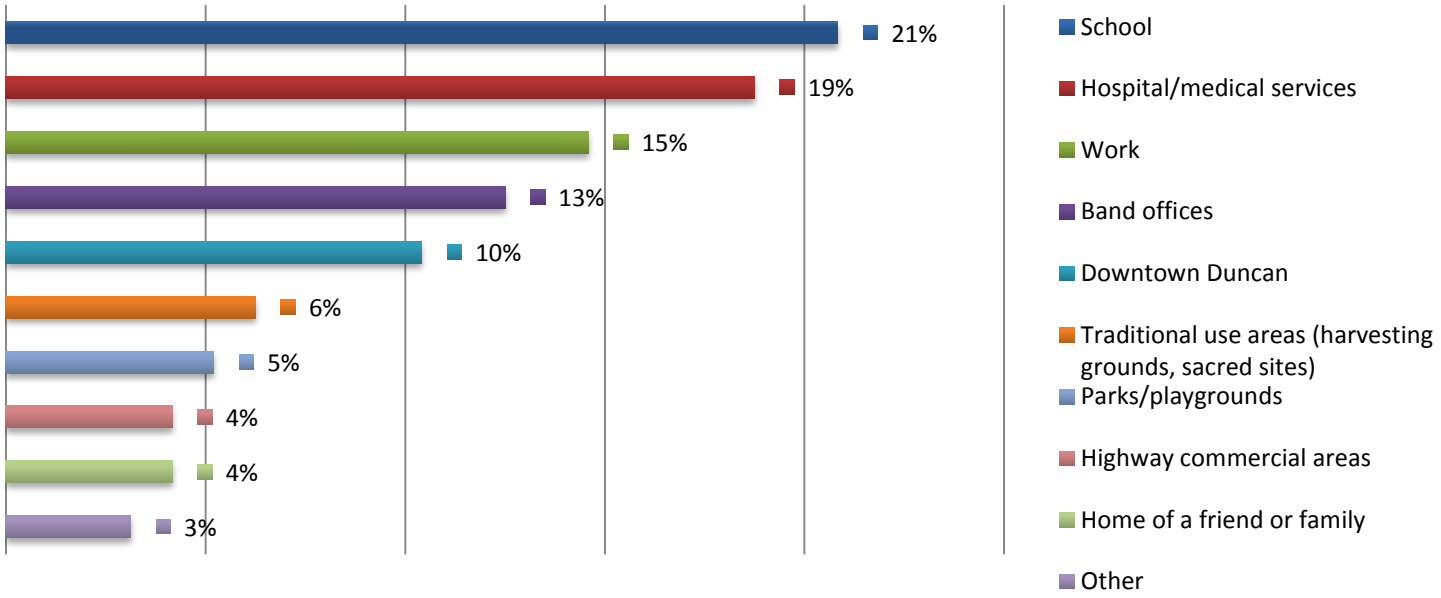
- no motor
- boat in the future
- medical/no motor for boat
- Not enough time
- I don't have one and it probably won’t get cleaned up.
- I don’t have one

If you had access to marine craft, what would it help you do that other modes of transportation cannot?

- Youth
- fishing food, family boats rides
- Food source
- Be able to get fish and crabs
- go to the bay; family at Pauquachin and get seafood
- launch the boat at Cow bay and at home
- I would use it- buy a boat
- enjoy boating/harvesting seafood

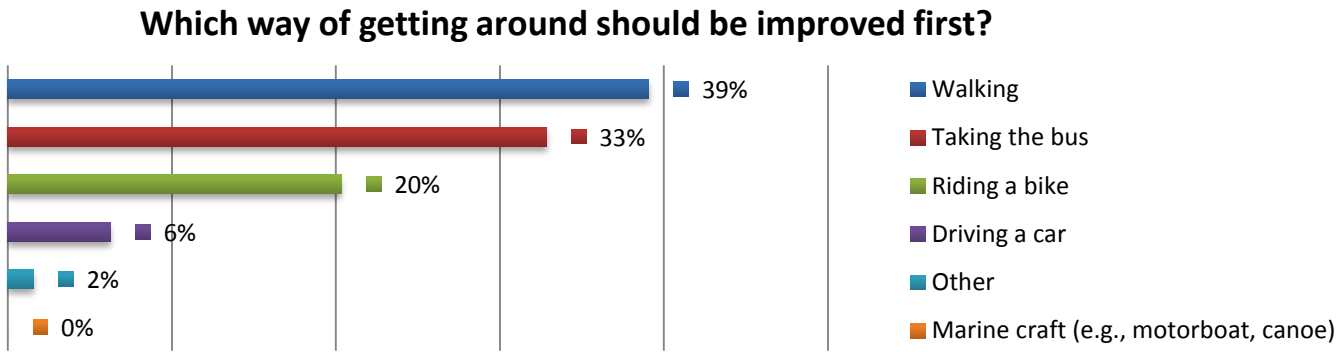
What do they think the priorities should be?

Thinking of the community, which places is it most important to be able to get to?



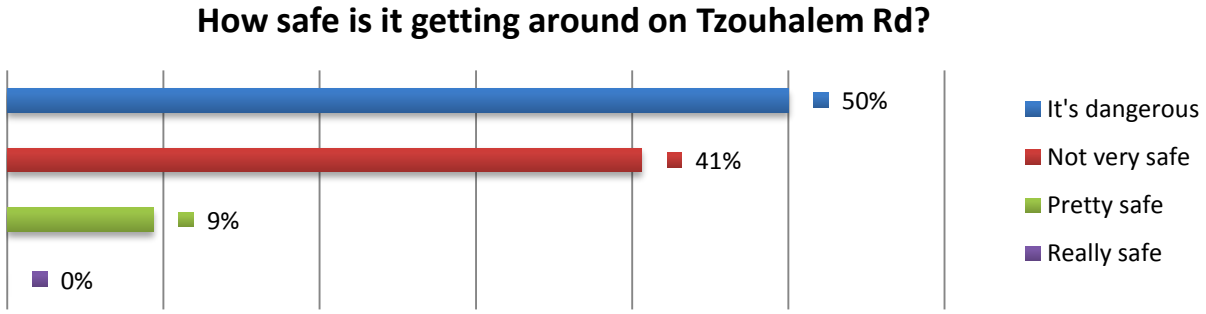
Under "other":

- Friendship centre
- Store, daycare
- Band office – HI
- Band office – TSW
- Emergency site (natural)



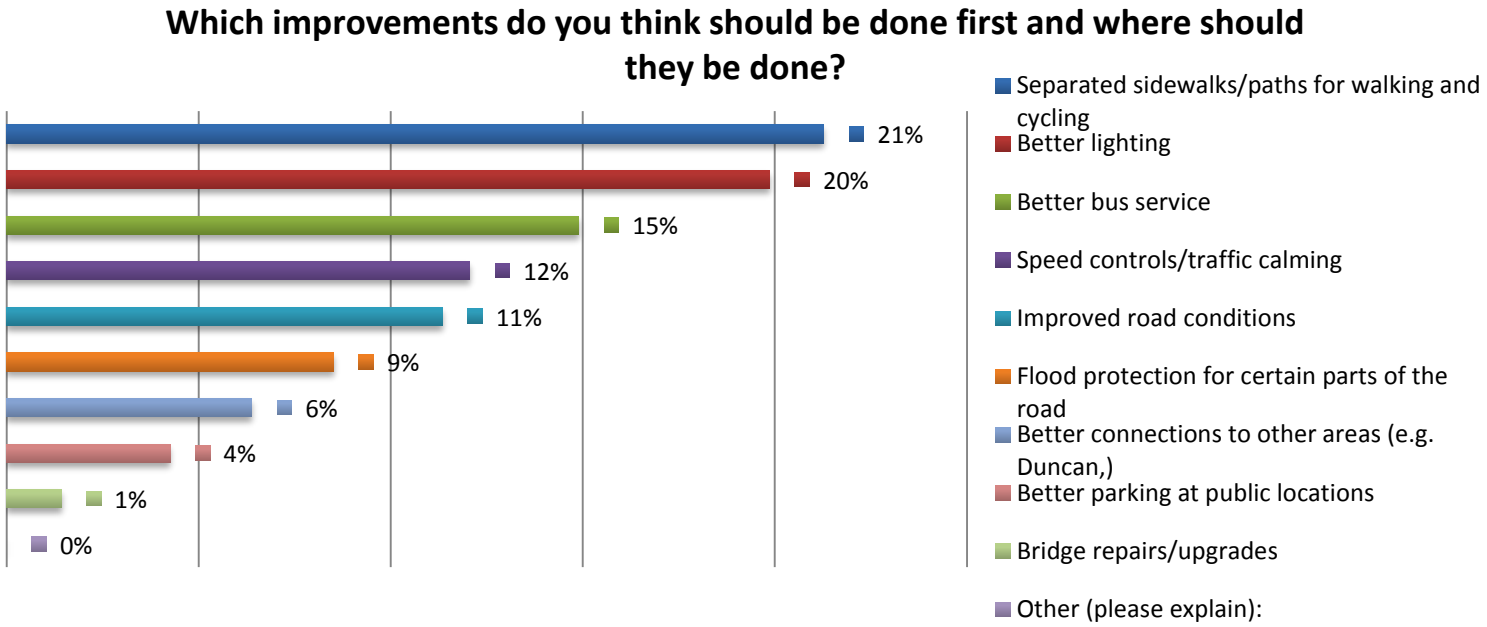
Under "other":

- Improve medical transportation – 2 visits



Under "comment":

- If they had the bus go through during the day
- Improve the crossroads
- Traffic
- It varies throughout the seasons



Under "other":

- Lights at farmers, Trestle Bridge

Are there any other ways that different areas could be better connected to each other?

- Improve and make actual trails to use
- Maybe more safer trails
- Community car groups like a car pool.
- We need to connect with Boys Rd
- Trail for the pedestrians
- Bridge to boys road, well lit and developed
- Regular bus when car breaks down.
- Quamichan,Comekin reserves-repair the logging roads
- Bus transport & Community service

- No – need playground
- Monitor areas

Is there anything that could make getting around easier for you or other people (youth, people with disabilities or Elders.)

- If everyone got a bike to get around and then they would have to make the bike paths.
- Shuttle buses for Elders with young children
- Shuttle bus
- Lights after the church- it's really dark
- Transit bus to go through Tzouhalem Rd
- Community bus
- buses , walkways(youth/Elders)
- Give away for free cars
- Bus transportation-locally
- A community bus that goes to all reserves
- Elder`s, youth
- Transit bus
- Bus service for the area
- A bus
- Better walkways and road conditions
- access to bikes
- more bus routes
- bus route for this part of Tzouhalem
- Walkway on past Tzouhalem and Khenipsin Rd- my sister's house to visit
- Elders need to be picked for meetings and dinners

Appendix 4: Street Safety Issues –MoTI submission

M E M O R A N D U M

Date: August 26, 2015

From: Helen Reid

To: Ministry of Transportation and Infrastructure (MoTI)

Re: Cowichan Tribes Priority Transportation Safety Concerns

In March 2015, Cowichan Tribes was invited to meet with MoTI to discuss concerns around transportation, mobility and street safety across the Cowichan Tribes communities. A meeting was held at Cowichan Tribes offices on May 20, 2015. In attendance was Chief Seymour, Alec Johnny, Operations and Maintenance Manager, Helen Reid, Referrals Coordinator, Dave Edgar, Transportation Planning Engineer, MoTI, Mike Pearson, District Transportation Engineer (MoTI) and Ryan Spillett, Operations Manager (MoTI). Following that meeting Cowichan Tribes was asked to submit a list of specific locations and the challenges they pose to transportation and mobility of our members.

During development of the Cowichan Tribes Comprehensive Community Plan (2012-2014), members identified street safety as a top concern and identified a number of locations where a lack of infrastructure on common walking and cycling routes made accessing common destinations dangerous, stressful and difficult. In late 2014, we began the development of a Community Transportation and Mobility Plan, involving additional engagement, research and analysis to identify shortcomings in our transportation network in more detail. This memorandum is based on information from that work.

Transportation and Mobility Challenges

For daily trips, a large number of Cowichan Tribes members walk or ride their bikes (47% of members, according to the Tzouhalem Corridor community survey). However, the poor conditions of the most populated and heavily used routes (on- and off-reserve) mean that many members find walking and riding around inconvenient, uncomfortable, difficult or dangerous. Some roads conditions also make driving dangerous.

The priority roads identified during our Comprehensive Community planning and Transportation and Mobility planning projects are the following:

- The Trans-Canada Highway (TCH)
- Boys Rd.
- Allenby Rd.
- River Rd.
- Tzouhalem Rd.
- Miller Rd.
- Indian Rd.

As the community is divided up by major barriers (e.g., the Trans Canada Highway, E&N railway, the Cowichan River) members have few options to access important destinations. The few routes which provide connections (those listed above) are characterized by:

- Poor pathway conditions (e.g. uneven, pot-holed gravel shoulders) when they exist at all;
- Inconsistent pathways (i.e., sidewalks that suddenly disappear mid-route, or shoulders of inconsistent quality requiring pedestrians to switch from one street to the next);
- Insufficient street lighting and other mobility problems;
- Insufficient or unsafe crossings of major roads;
- High traffic speeds;
- Poor roadway conditions.

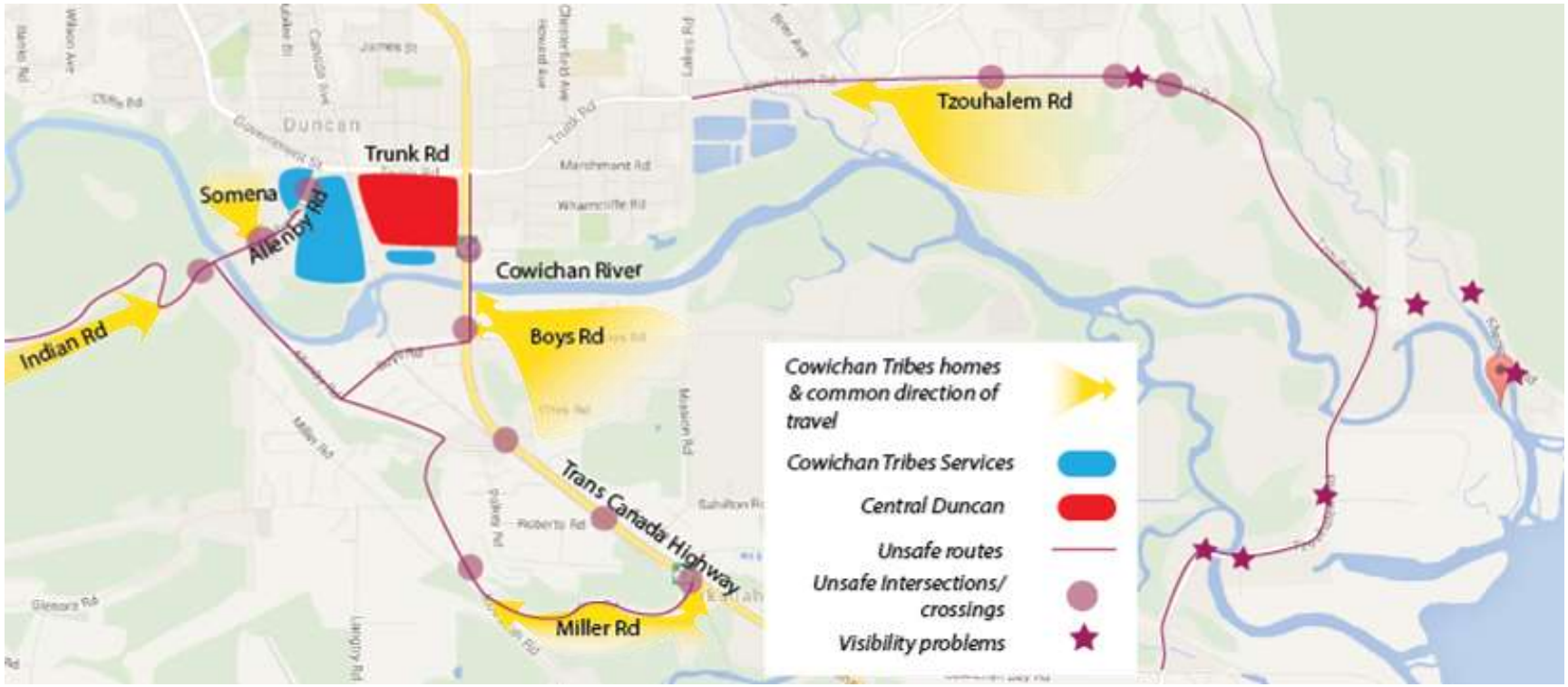
The poor condition of basic infrastructure on-reserve and in some places off-reserve (e.g. TCH crossings) not only leaves many members feeling unsafe in their own community, but is directly responsible for the injury and death of members every year. Additionally, the shortcomings in the transportation network restrict Cowichan Tribes members' access to employment, education, services, health care, healthy food, recreation, traditional and cultural activities, family, and community. These issues detract from Cowichan Tribes quality of life and the ability of members to thrive and succeed.

This memo outlines the priority issue areas exposing Cowichan Tribe members to an elevated risk of injury or death, and preventing Cowichan Tribes members from safely accessing the opportunities and amenities they need on a daily basis.

Issues Summary Table

The following table summarizes the priority issues with the transportation network identified by Cowichan Tribes. They are organized by location according to the main road in proximity (Note: Boys Rd., though one of the highest priority areas, has been omitted following direction from MoTI personnel citing jurisdictional limits).

Corridor	Issue
TCH	• Unsafe and stressful for active transportation users crossing TCH (at multiple locations) to reach common destinations; Cowichan Way crossing a key concern • Unsafe and stressful for active transportation users travelling along TCH from Boys road to Trunk Road (at least)
Allenby Road	• Intersection of Allenby, Indian, and Miller Roads confusing and unsafe for all users • Unsafe and stressful for active transportation users travelling along Allenby from Whitebridge to Cowichan Tribes offices • Unsafe and stressful for active transportation users travelling along Allenby from Whitebridge to Boys Rd. and Miller Rd. (south of the river). • Allenby Road and Whitebridge lack well-defined lanes • Unsafe crossings at key points on Allenby (i.e. Club Rd. and River Rd.) • Poor visibility in Somena area (i.e. on and near Club Rd.)
Tzouhalem Rd.	• Unsafe crossings at multiple points along Tzouhalem (Quamichan east and west; opposite Donnay Rd.) • Poor visibility all along Tzouhalem and nearby streets • Unsafe pedestrian conditions along length of Tzouhalem • Unsafe driving conditions along Tzouhalem (e.g. potholes, narrow road, including conditions of all three bridges)
Indian Rd.	• Poor visibility all along Indian Rd. • Unsafe pedestrian conditions along length of Indian Rd. (intermittent and inconsistent shoulder force members to repeatedly cross street while walking) • Driver safety due to poor road conditions (e.g., areas of road 'caving in')
Miller Rd.	• Dangerous intersection crossing at Miller and Koksilah (at location of bus stop) • Poor visibility all along Miller Rd. • Unsafe pedestrian conditions along length of Miller Rd. (intermittent and inconsistent shoulder force members to repeatedly cross street while walking)
General	• Traffic speed is high along all reserve roads (Tzouhalem, Allenby, Indian, Miller, Boys Rds.)

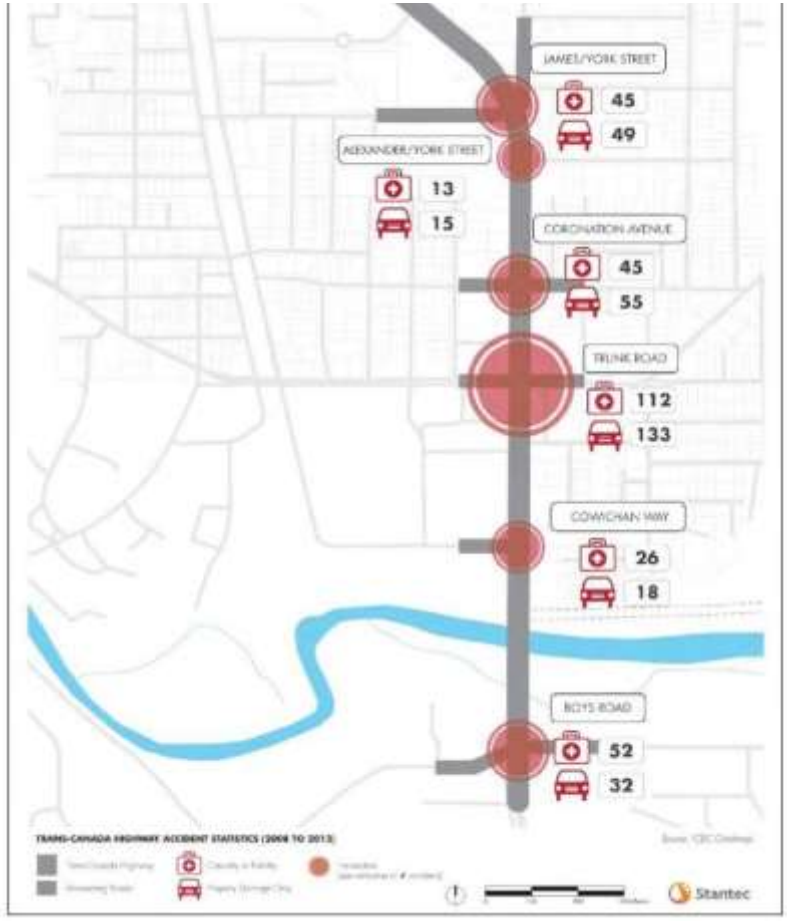


Map 1: Areas of origin and destination and unsafe locations for Cowichan Tribes Active Transportation Users.

Transportation Safety Details

The TCH is undoubtedly one of the main barriers for members walking and riding their bikes. It causes critical network gaps separating some of our most populated reserve communities (Boys Rd and Tzouhalem Rd) from the schools, amenities and community services located in or near Central Duncan. People (including Cowichan Tribes' members) are regularly risking unsafe crossings of the TCH in order to save themselves time walking to the nearest controlled crossing. The following ICBC collision data illustrates this well.

Figure: TCH Corridor Collision Data



Source: TCH Corridor Management Plan (2014) Figure 2-2 (data from ICBC.com)

At the Cowichan Way and Boys Rd intersections, the proportion of the collisions that results in casualty or fatality is higher than anywhere else along the corridor study area. This may suggest a higher number of risky pedestrian crossings, and given the location of these intersections along a route linking central Duncan with a major Cowichan Tribes residential area (Boys Rd.), there is some concern that a number of these accidents could involve Cowichan Tribes members.

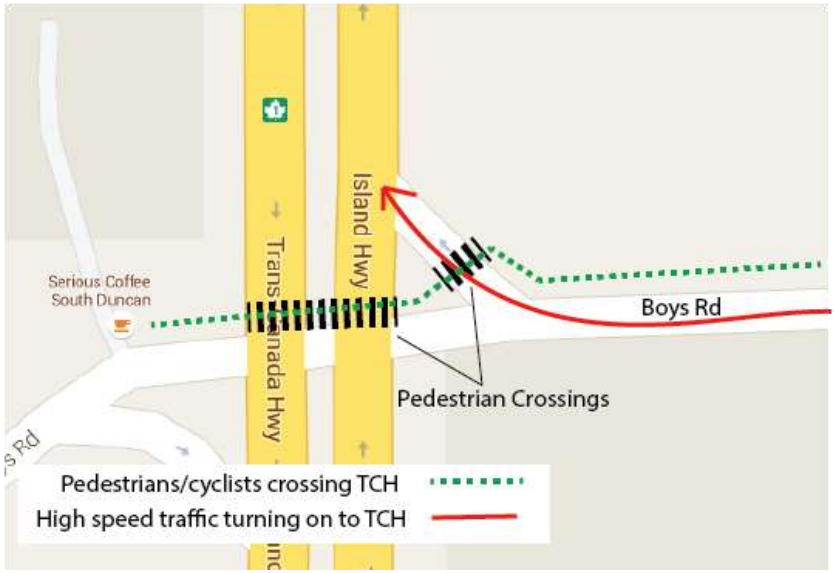
Collisions along TCH			
Intersection	**Property Damage**	**Casualty or Fatality**	**Proportion of collisions that result in Casualty or Fatality**
James/York St.	49	45	48%
Coronation Ave.	55	45	45%
Trunk Rd.	133	112	46%
Cowichan Way	18	26	59%
Boys Rd.	32	52	62%

According to members and Cowichan Tribes staff, unsafe crossings are a regular occurrence along the entire length of the TCH as it passes through the Duncan area.

As a route, the narrow, unprotected sidewalks and high traffic speed along the TCH make for a high-stress and uncomfortable pedestrian environment, and are too narrow to accommodate multiple users at the same time. Those that can, choose an alternate route to cross the Cowichan River into Central Duncan that they must regard as more desirable – an active railway bridge located just west of the TCH (known as 'Blackbridge'). The need to navigate railway ties as steps limits this 'preferred' route to those that are more mobile, however.

The images on the following page (all screenshots from Google Streetview) of residents using rolling transportation modes attest to the conditions being endured by those with limited mobility.

Figure: Boys Rd. channelized right turn



Conditions for active transportation users along on-reserve roads is typically even worse, where members make do with narrow, uneven, and intermittent shoulders; poor crossings; high traffic speeds; and poor visibility. The following images are from Google Maps Streetview across the Cowichan Tribes reserves demonstrating their use and illustrating some of the conditions discussed in this memo.

Shoulder used for parking by area hikers forces pedestrians into street (1740 Tzouhalem Rd.)

Difference in infrastructure on and off-reserve as Jayne Rd (above) becomes Quamichan Rd (below) in crossing Tzouhalem Rd.

Man with bicycle walks toward Whitebridge along Allenby Rd (3043 Allenby Rd)

Two youths ride down Indian Rd towards Duncan in oncoming lane (5548 Indian Rd.) towards intersection below

Difficult to navigate intersection of Allenby, Miller and Indian roads at entrance to Whitebridge

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